

# Amazing

Fact and Science Fiction

stories

JULY

35¢

MAC 7

From the Ruins of Stonehenge  
To the Starships of Vallon  
They Sought the Secret of--

## A TRACE OF MEMORY

a novel by Keith Laumer

Classic Reprint:

**THE CHAMBER  
OF LIFE**



Birmingham

Coming in July **FANTASTIC**



*death  
chant*

*The waves  
dashed white foam* against the balcony,  
but she lay there still and silent, her blond hair streaming loose.  
And all the while the statues sang a strange song of love . . . and  
death.

J. G. Ballard, an outstanding British sf writer, creates an  
unforgettable character and an unforgettable tale of love and  
terror in **THE SINGING STATUES**.

**plus**—the late Nat Schachner's **DRAGON OF ISKAN-  
DER**, a fantasy about the Lost Race and how they recreated a  
civilization in the Himalaya Mountains and started a legend of  
dragons among men.

**There's exciting reading in July FANTASTIC!**

**On sale June 21**

**Still only 35¢**

AMAZING STORIES, Fact and Science Fiction, Vol. 36, No. 7, July, 1962, is published monthly  
by Ziff-Davis Publishing Company, at 434 South Wabash Avenue, Chicago 5, Illinois. Sub-  
scription rates: One year United States and possessions \$3.50; Canada and Pan American  
Union Countries \$4.00; all other foreign countries \$4.50. Second Class postage paid at  
Chicago, Illinois and at additional mailing offices.

# Amazing

Fact and Science Fiction Stories

JULY, 1962

Vol. 36, No. 7

REG. U. S. PAT. OFF.

"FIRST IN SCIENCE FICTION SINCE 1926"

## NOVELET

- THE CHAMBER OF LIFE (A Classic Reprint)  
By G. Peyton Wertenbaker ..... 96

## SHORT STORIES

- THE BLONDE FROM BARSOOM  
By Robert F. Young ..... 62
- A PRISON MAKE  
By William W. Stuart ..... 71
- THE LAST CLASS  
By Richard Banks ..... 87

## SERIAL

- A TRACE OF MEMORY  
(Part one of three parts)  
By Keith Laumer ..... 6

## FACT

- THE THREE REQUIREMENTS OF LIFE IN  
THE SOLAR SYSTEM  
By Ben Ben Bovo ..... 124

## FEATURES

- ... OR SO YOU SAY ..... 4
- EDITORIAL ..... 5
- THROUGH TIME AND SPACE WITH  
BENEDICT BREADFRUIT: V  
By Randall Barretton ..... 70
- COMING NEXT MONTH ..... 136
- THE SPECTROSCOPE ..... 141

Cover: Lloyd Birmingham

**SUBSCRIPTION SERVICE:** All subscription correspondence should be addressed to AMAZING STORIES, Circulation Department, 434 South Wabash Avenue, Chicago 5, Illinois. Please allow at least six weeks for change of address. Include your old address, as well as new—enclosing if possible an address label from a recent issue.

**EDITORIAL CONTRIBUTIONS** must be accompanied by return postage and will be handled with reasonable care; however publisher assumes no responsibility for return or safety of art work, photographs or manuscripts.

## ZIFF-DAVIS PUBLISHING COMPANY

William B. Ziff, Chairman of the Board  
(1946-1953)

William Ziff, President

W. Bradford Briggs, Executive Vice President

Hershel B. Sarbin, Vice President and General Manager

M. T. Birmingham, Jr., Vice President and Treasurer

Robert P. Breeding, Circulation Director

Charles Neusman, Financial Vice President

Stanley H. Greenfield, Vice President

## Editorial Director

NORMAN M. LOBSENZ

## Editor

CELE GOLDSMITH

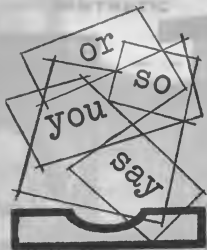
Ziff-Davis Publishing Company  
Editorial and Executive Offices  
One Park Avenue  
New York 16, New York  
ORegon 9-7200  
Advertising Manager  
Martin Gluckman

Midwestern and Circulation Office  
434 South Wabash Avenue  
Chicago 5, Illinois  
WAbash 2-4911

Western Office  
9025 Wilshire Boulevard  
Beverly Hills, California  
CRestview 4-0285



Copyright © 1962 by Ziff-Davis Publishing Company. All rights reserved.



Dear Editor:

Recently AMAZING (which is a pretty good sf magazine) has published two stories by Mark Clifton (who used to be a pretty good sf writer). These stories have so infuriated me that I have taken time off from four College essays that I should be writing to send you this letter. I have a question that I'd like you to ask Mr. Clifton on my behalf: Why have you so suddenly taken leave of the human race?

From the two stories, "Pawn of the Black Fleet" and "Hang Head, Vandal!", I get the impression that Mr. Clifton would get a lot more pride out of being some kind of jellyfish (if he was one) than he does out of being an adult and presumably mature

member of genus *Homo Sapiens*. These two stories express a disgust with people carried so far that it amounts almost to psychopathic hatred of Humanity. On Mr. Clifton's showing you, I and everybody else (with the possible exception of Mr. Clifton) hardly deserve to exist. We're more like some kind of pollution on the clean face of the universe. Man is conceited, contemptible, and capable only of destroying anything fine and good that he comes face to face with. His total achievement to date isn't valuable enough to be worth spitting on. And his hope for future achievement along any worthwhile lines doesn't seem to be much better.

If all this were true, my personal advice to every single man, woman and child on this planet would be to go out and shoot themselves before they could do any more harm. Mr. Clifton would be included in this advice. As things are, however, I think that human beings are basically a pretty nice lot, and that Clifton has maligned them to the extent that . . . well, at this point words fail me. What Clifton seems to have done is to skillfully pick out some of our petty weaknesses and nastinesses, combined them all together into a stuffed straw figure like the spacesuit in "Hang Head, Van-

(Continued on page 137)

## EDITORIAL

COSMOLOGICAL theorists have for some years now been arguing about whether the universe began with a "big bang" and has since been expanding and running down, or whether it had no beginning at all, but is in a process of continuous creation. It is unlikely that man will ever be able precisely to determine the answer to this question. But what makes things interesting in the meantime is the way in which various newly-discovered items of astronomical import lend themselves to one theory or the other, or, sometimes, to both.

Such a development has recently occurred with reference to the radio stars, or radio galaxies. So far, scientists have identified about 100 of the radio sources in space with various optically-visible galaxies. The "normal" radio galaxy emits energy in the range of ten billion billion billion kilowatts per second. The so-called "peculiar" radio galaxy emits much more intense radio waves. For example, Cygnus A gives off 10 million billion billion billion kilowatts per second—a million times more than the "norm."

Now two astronomers have deduced, from this information, two opposing theories. Dr. Geoffrey Burbidge, of the Yerkes Observatory, suggests that the high kilowatt emission of the "peculiar" galaxies may be caused by a chain of supernova explosions triggered off within a galaxy. On the other hand, a Soviet physicist, V. L. Ginzburg, suggests that the cause may be attributed to the *formation* of a galaxy, rather than to its partial destruction. In the Russian's view, as gas clouds form stars within a galaxy, the gravitational energy released creates cosmic rays. The collisions between cosmic rays and atoms of the contracting gas clouds could result in producing enough high-speed electrons necessary to create intense radio emissions.

At any rate, so formidable an expert as Dr. D. S. Heesch, of the National Radio Astronomy Observatory at Green Bank, W. Va., can only conclude that what's going on in the radio galaxies "presents one of the most fascinating and puzzling problems in astronomy." N.L.

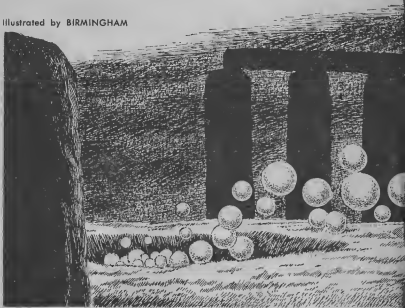
# A TRACE OF MEMORY

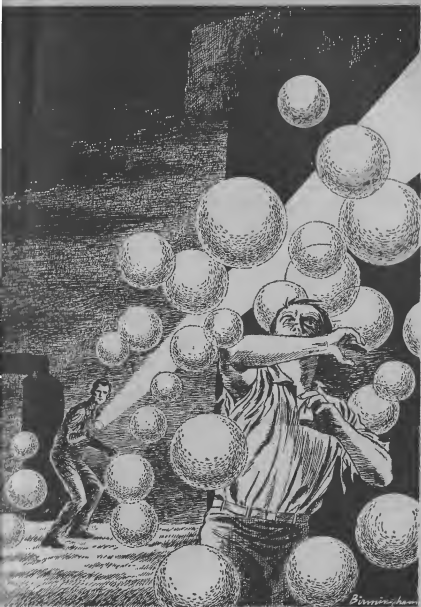
By KEITH LAUMER

(Part one of three parts)

*When Legion signed on as a soldier of fortune he did not expect to wind up as the master of a private island. Nor did he expect to cower in ancient Druid pits . . . nor fight for his life in the great hall at Okk-Hamiloth, on a planet galaxies away. A master story-teller sweeps you through time and space in a novel of retribution.*

Illustrated by BIRMINGHAM





Birmingham

HE opened his eyes and saw a grey wall where a red light gleamed balefully in the gloom. He lay on a utility mat on a high couch, clad in a gown of strange purple. In his arm there burned a harsh pain, and he saw on his skin the mark of the Hunters. Who could have dared?

He sat up, swung his legs over the side of the narrow cot . . . and saw the bodies of two men huddled on the floor, blood-splashed. Beyond, at a doorway, lay another, and another. . . . What carnage was this? Gently he rolled the nearest body on its back—and crouched rigid in shock. Ammaerln, his friend. . . . Not dead, but the pulse was faint, too faint. And the next corpse? That, too, wore a face that had been dear to him. And the bodies at the entry—his faithful men. All were friends!

Beyond the door the ranged shelves of a library gave back not even an echo when he called. He turned again to his dead. It was fresh death, the blood still wet. Quickly he scanned the room, saw a recording monitor against a wall. He fitted the neurodes to the dying man's temples. But for this gesture of recording his life's memories, there was nothing he could do. He must get him to a therapist and quickly. But no one answered his calls. Was he alone in these chambers of death?

He ran through the library to a great echoing hall beyond. This was not the Sapphire Palace beside the Shallow Sea. The lines were unmistakeable: he was aboard a ship, a far-voyager. Why? How? He stood uncertain. The silence was absolute.

He crossed the Great Hall and entered the observation lounge. Here lay another dead man, by his uniform a member of the crew. He touched a knob and the great screens glowed blue. A giant crescent swam into focus, locked, soft green against the black of space. Beyond it a smaller companion hung, blue-blotched, airless. What worlds were these?

WHEN he had ranged the vast ship from end to end he knew that he alone still lived. Seven corpses, cruelly slashed, peopled the silent vessel. In the control sector the communicator lights glowed but to his call there was no answer from the strange world below.

He returned to the recording room. Ammaerln still breathed weakly. The memory recording had been completed; all that the dying man remembered of his long life was imprinted now in the silvery cylinder. It remained only to color-code the trace; that he would do on his return.

His eye was caught by a small object still projecting from an



aperture at the side of the high couch where he had wakened. It was his own memory trace. So he himself had undergone the Change!

He thrust the color banded cylinder into a gown pocket—then whirled at a sound. A nest of Hunters—the swarming globes of pale light used to track down criminals—clustered at the door; then they were upon him.

Without a weapon, he was helpless. He must escape the ship—and quickly! While the suffocating horde pressed close, humming in their eagerness, he caught up the unconscious Ammaerln. The Hunters trailed him like a luminous streamer as he ran to the shuttle boat bay.

Three shuttles lay in their cradles. He groped to a switch, his head swimming with the sulphurous reek of his attackers. Light flooded the bay, driving them back. He entered the lifeboat, placed the body on a cushioned couch. Perhaps he would find help for his friend below.

It had been long since he had manned the controls of a vessel, but he had not forgotten.

THE last of life ebbed from the injured man long before they reached the planetary surface. The boat settled gently and the lock cycled. He looked out at a vista of ragged forest.

This was no civilized world.

Only the landing ring and the clearing around it showed the presence of man.

There was a hollow in the earth by a square marker block at the eastern perimeter of the clearing. He carried his friend there and placed him in it, scraped earth over the body. He lingered for a moment, then he rose and turned back toward the shuttle boat. . . .

A dozen men, squat, bearded, wrapped in the shaggy hides of beasts, stood between him and the access ladder. The tallest among them shouted, raised a bronze sword threateningly. Others clustered at the ladder. One scrambled up, reached the top, disappeared into the boat. In a moment he reappeared at the opening and hurled down an armful of small bright objects of varied shapes and textures. Others clambered up to share the loot as the first man again vanished within the boat. But before the foremost had gained the entry the port closed, shutting off a terrified cry from within the shuttle boat.

Men dropped from the ladder as it swung up. The boat rose slowly, angling toward the west, dwindling. The savages shrank back, awed.

The man watched until the tiny blue light was lost against the sky.

THE ad read: "Soldiers of fortune seeks companion in arms to share unusual adventure. Foster, Bos 19, Mayport."

I crumpled the newspaper and tossed it in the general direction of the wire basket beside the park bench, pushed back a slightly frayed cuff, and took a look at my bare wrist. It was just habit; the watch was in a hock shop in Tupelo, Mississippi. It didn't matter. I didn't have to know what time it was.

Across the park most of the store windows were dark along the side street. There were no people in sight; they were all home now, having dinner. As I watched, the lights blinked off in the drug store with the bottles of colored water in the window; that left the candy and cigar emporium at the end of the line. I fidgeted on the hard bench and felt for a cigarette I didn't have. I wished the old boy back of the counter would call it a day and go home. As soon as it was dark enough, I was going to rob his store.

I wasn't a full-time stick-up artist. Maybe that's why that nervous feeling was playing around under my rib cage. There was really nothing to it. The wooden door with the hardware-counter lock that would open almost as easily without a key as

with one; the sardine-can metal box with the day's receipts in it; I'd be on my way to the depot with fare to Miami in my pocket ten minutes after I cracked the door. I'd learned a lot harder tricks than petty larceny back when I had a big future ahead with Army Intelligence. That was a long time ago, and I'd had a lot of breaks since then—none good.

I got up and took another turn around the park. It was a warm evening, and the mosquitos were out. I caught a whiff of frying hamburger from the Elite Cafe down the street. It reminded me that I hadn't eaten lately. There were lights on at the Commercial Hotel and one in the ticket office at the station. The local police force was still sitting on a stool at the Rexall talking to the counter girl. I could see the .38 revolver hanging down in a worn leather holster at his hip. All of a sudden, I was in a hurry to get it over with.

I took another look at the lights. All the stores were dark now. There was nothing to wait for. I crossed the street, sauntered past the cigar store. There were dusty boxes of stogies in the window, and piles of homemade fudge stacked on plates with paper doilies under them. Behind them, the interior of the store looked grim and dead. I

passed, looked around, moved toward the door—

A BLACK sedan eased around the corner and pulled in to the curb. A face leaned over to look at me through lenses like the bottoms of tabasco bottles. the hot evening air stirred, and I felt my damp shirt cold against my back.

"Looking for anything in particular, Mister?" the cop said.

I just looked at him.

"Passing through town, are you?" he asked.

For some reason I shook my head.

"I've got a job here," I said. "I'm going to work—for Mr. Foster."

"What Mr. Foster?" The cop's voice was wheezy, but relentless, a voice used to asking questions.

I remembered the ad—something about an adventure. Foster, Box 19. The cop was still staring at me.

"Box nineteen," I said.

He looked me over some more, then reached across and opened the door. "Better come on down to the station house with me, Mister," he said.

At Police Headquarters, the cop motioned me to a chair, sat behind a desk, and pulled a phone to him. He dialled slowly, then swivelled his back to me to talk. Insects danced around a bare light bulb. There was an odor of

stale beer and leather and unwashed bedding. I sat and listened to a radio in the distance wailing a sad song.

It was half an hour before I heard a car pull up outside. The man who came through the door was wearing a light suit that was neither new nor freshly pressed, but had that look of perfect fit and taste that only the most expensive tailoring can achieve. He moved in a relaxed way, but with a sense of power held in reserve. At first glance I thought he was in his middle thirties, but when he looked my way I saw the fine lines around the blue eyes. I got to my feet. He came over to me.

"I'm Foster," he said, and held out his hand. I shook it.

"My name's Legion," I said.

The desk sergeant spoke up. "This fellow says he come here to Mayport to see you, Mr. Foster."

Foster looked at me steadily. "That's right, Sergeant. This gentleman is considering a proposition I've made."

"Well, I didn't know, Mr. Foster," the cop said.

"I quite understand, Sergeant," Foster said. "We all feel better, knowing you're on the job."

"Well, you know," the cop said.

"We may as well be on our way then," Foster said. "If you're ready, Mr. Legion."

"Sure, I'm ready," I said. Mr. Foster said goodnight to the cop and we went out. On the pavement in front of the building I stopped.

"Thanks, Mr. Foster," I said. "I'll get out of your hair now."

FOSTER had his hand on the door of a deceptively modest-looking cabriolet. I could smell the solid leather upholstery from where I stood.

"Why not come along to my place, Legion," he said. "We might at least discuss my proposition."

I shook my head. "I'm not the man for the job, Mr. Foster," I said. "If you'd like to advance me a couple of bucks, I'll get myself a bite to eat and fade right out of your life."

"What makes you so sure you're not interested?"

"Your ad said something about adventure. I've had my adventures. Now I'm just looking for a hole to crawl into."

"I don't believe you, Legion." Foster smiled at me, a slow, calm smile. "I think your adventures have hardly begun."

I thought about it. If I went along, I'd at least get a meal—and maybe even a bed for the night. It was better than curling up under a tree.

"Well," I said, "a remark like that demands time for an explanation." I got in the car and

sank back in a seat that seemed to fit me like Foster's jacket fit him.

"I hope you won't mind if I drive fast," Foster said. "I want to be home before dark." We started up and wheeled away from the curb like a torpedo sliding out of the launching tube.

I GOT out of the car in the drive at Foster's house, and looked around at the wide clipped lawn, the flower beds that were vivid even by moonlight, the line of tall poplars, and the big white house.

"I wish I hadn't come," I said. "This kind of place reminds me of all the things I haven't gotten out of life."

"Your life's still ahead of you," Foster said. He opened the slab of mahogany that was the front door, and I followed him inside. At the end of a short hall he flipped a switch that flooded the room before us with soft light. I stared at a pale grey carpet about the size of a tennis court, decked out with Danish teak upholstered in rich colors. The walls were a rough-textured grey; here and there were expansively framed abstractions. The air was cool with the heavy coolness of air conditioning. Foster crossed to a bar that looked modest in the setting, in spite of being bigger than those in most beer joints.

"Would you care for a drink?" he said.

I looked down at my limp, stained suit, and grimy cuffs.

"Look, Mr. Foster," I said. "I just realized something. If you've got a stable, I'll go sleep in it—"

Foster laughed. "Come on; I'll show you the bath."

I CAME downstairs, clean, showered, and wearing a set of Foster's clothes. I found him sitting, sipping a drink and listening to music.

"The *Liebestod*," I said. "A little gloomy, isn't it?"

"I read something else into it," Foster said. "Sit down and have a bite to eat and a drink."

I sat in one of the big soft chairs and tried not to let my hand shake as I reached for one of the sandwiches piled on the coffee table.

"Tell me something, Mr. Legion," Foster said. "Why did you come here, mention my name—if you didn't intend to see me?"

I shook my head. "It just worked out that way."

"Tell me something about yourself," Foster said.

"It's not much of a story."

"Still, I'd like to hear it."

"Well, I was born, grew up, went to school—"

"What school?"

"University of Illinois."

"What was your major?"

"Music," I answered at once.

Foster looked at me, frowning slightly.

"It's the truth," I said. "I wanted to be a conductor. The army had other ideas. I was in my last year when the draft got me. They discovered I had what they considered an aptitude for Intelligence work. I didn't mind it. I had a pretty good time for a couple of years."

"Go on," Foster said. Well, I'd had a bath and a good meal. I owed him something. If he wanted to hear my troubles, why not tell him?

"I was putting on a demonstration. A defective timer set off a charge of HE fifty seconds early on a one-minute setting. A student was killed; I got off easy with a busted eardrum and a pound or two of gravel imbedded in my back. When I got out of the hospital, the army felt real bad about letting me go—but they did. My terminal leave pay gave me a big weekend in San Francisco and set me up in business as a private investigator."

I took another long pull at a big pewter tankard of ale and went on.

"I had enough left over after the bankruptcy proceeding a few months later to get me to Las Vegas. I lost what was left and took a job with a casino operator named Gonino."

"I stayed with Gonino for

nearly a year. Then one night a visiting bank clerk lost his head and shot him eight times with a .22 target pistol. I left town the same night."

I SWALLOWED some more of Foster's ale. It was the best. Foster was a pretty good egg, too.

"After that I sold used cars for a couple of months in Memphis; then I made like a life guard at Daytona; baited hooks on a thirty foot tuna boat out of Key West; all the odd jobs with low pay and no future. I spent a couple of years in Cuba; all I got out of that was two bullet scars on the left leg, and a prominent position on a CIA blacklist.

"After that things got tough. A man in my trade can't really hope to succeed in a big way without the little blue card in the plastic cover to back his play. I was headed south for the winter, and I picked Mayport to run out of money."

I stood up. "I sure enjoyed the bath, Mr. Foster, and the meal, too—not to mention the beer. I'd like real well to get in that bed upstairs and have a night's sleep just to make it complete; but I'm not interested in the job." I turned away, started across the room.

"Legion," Foster said. I turned. A beer bottle was hanging in the air in front of my face.

I put a hand up fast and the bottle slapped my palm.

"Not a bad set of reflexes for man whose adventures are all behind him," Foster said.

I tossed the bottle aside. "If I'd missed, that would have knocked my teeth out," I said angrily.

"You didn't miss—even though you're weaving a little from the beer. And a man who can feel a pint or so of beer isn't an alcoholic—so you're clean on that score."

"I didn't say I was ready for the rummy ward," I said. "I'm just not interested in your proposition—whatever it is."

"Legion," Foster said, "maybe you have the idea I put that ad in the paper last week, on a whim. The fact is, I've been running it—in one form or another—for over eight years."

I looked at him and waited.

"Not only locally—I've run it in the big-city papers, and in some of the national weekly and monthly publications. All together, I've had perhaps fifty responses."

Foster smiled wryly. "About three quarters of them were from women who thought I wanted a playmate. Several more were from men with the same idea. The few others were hopelessly unsuitable."

"That's surprising," I said. "I'd have thought you'd have

brought half the nuts in the country out of the woodwork by now."

Foster looked at me, not smiling. I realized suddenly that behind the urbane façade there was a hint of tension, a trace of worry in the level blue eyes.

I'D LIKE very much to interest you in what I have to say, Legion. I think you lack only one thing—confidence in yourself."

I gave a sort of laugh. "What are the qualifications you think I have? I'm a jack of no trades—"

"Legion, you're a man of considerable intelligence and more than a little culture; you've travelled widely and know how to handle yourself in difficult situations—or you wouldn't have survived. I'm sure your training includes techniques of entry and fact-gathering not known to the average man; and perhaps most important, although you're an honest man, you're capable of breaking the law—when necessary."

"So that's it," I said.

"No, I'm not forming a mob, Legion. As I said in the ad—this is an unusual adventure. It may—probably will—involve infringing various statutes and regulations of one sort or another. After you know the full story I'll leave you to judge whether it's justifiable."

If Foster was trying to arouse

my curiosity, he was succeeding. He was dead serious about whatever it was he was planning. It sounded like something no one with good sense would want to get involved in—but on the other hand, Foster didn't look like the sort of man to do anything foolish . . .

"Why don't you tell me what this is all about?" I said. "Why would a man with all this—" I waved a hand at the luxurious room—"want to pick a hobo like me out of the gutter and talk him into taking a job?"

"Your ego has taken a severe beating, Legion—that's obvious. I think you're afraid that I'll expect too much of you—or that I'll be shocked by some disclosure you may make. Perhaps if you'd forget yourself and your problems for the moment, we could reach an understanding—"

"Yeah," I said. "Just forget my problems—"

"Chiefly money problems, of course. Most of the problems of this society involve the abstraction of values that money represents."

"Okay," I said. "I've got my problems, you've got yours. Let's leave it at that."

"You feel that, because I have material comfort, my problems must of necessity be trivial ones. Tell me, Mr. Legion: have you ever known a man who suffered from amnesia?"

FOSTER crossed the room to a small writing desk, took something from a drawer, looked at me.

"I'd like you to examine this," he said.

I went over and took the object from his hand. It was a small book, with a cover of drab-colored plastic, unornamented except for an embossed design of two concentric rings. I opened the cover. The pages were as thin as tissue, but opaque, and covered with extremely fine writing in strange foreign characters. The last dozen pages were in English. I had to hold the book close to my eyes to read the minute script:

"January 19, 1710. Having come nigh to calamity with the near lofs of the key, I will henceforth keep thif journal in the Englifh tongue. . . ."

"If this is an explanation of something, it's too subtle for me," I said.

"Legion, how old would you say I am?"

"That's a hard one," I said. "When I first saw you I would have said the late thirties, maybe. Now, frankly, you look closer to fifty."

"I can show you proof," Foster said, "that I spent the better part of a year in a military hospital in France. I awakened in a ward, bandaged to the eyes, and with no memories whatever of

my life before that day. According to the records made at the time, I appeared to be about thirty years of age."

"Well," I said, "amnesia's not so unusual among war casualties. You've done well since."

Foster shook his head impatiently. "There's nothing difficult about acquiring material wealth in this society, though the effort kept me well occupied for a number of years—and diverted my thoughts from the question of my past life. The time came, however, when I had the leisure to pursue the matter. The clues I had were meagre enough; the notebook I've shown you was found near me, and I had a ring on my finger." Foster held out his hand. On the middle finger was a massive signet, engraved with the same design of concentric circles I had seen on the cover of the notebook.

I WAS badly burned; my clothing was charred. Oddly enough, the notebook was quite unharmed, though it was found among burned debris. It's made of very tough stuff."

"What did you find out?"

"In a word—nothing. No military unit claimed me. I spoke English, from which it was deduced that I was English or American—"

"They couldn't tell which, from your accent?"



"Apparently not; it appears I spoke a sort of hybrid dialect."

"Maybe you're lucky. I'd be happy to forget my first thirty years."

"I spent a considerable sum of money in my attempts to discover my past," Foster went on. "And several years of time. In the end I gave it up. And it wasn't until then that I found the first faint inkling."

"So you did find something?"

"Nothing I hadn't had all along. The notebook."

"I'd have thought you would have read that before you did anything else," I said. "Don't tell me you put it in the bureau drawer and forgot it."

"I read it, of course—what I could read of it. Only a relatively small section is in English. The rest is a cipher. And what I read seemed meaningless—quite unrelated to me. You've glanced through it; it's no more than a journal, irregularly kept, and so cryptic as to be little better than a code itself. And of course the dates; they range from the early eighteenth century through the early twentieth."

"A sort of family record, maybe," I said. "Carried on generation after generation. Didn't it mention any names, or places?"

"Look at it again, Legion," Foster said. "See if you notice anything odd—other than what we've already discussed."

I thumbed through the book again. It was no more than an inch thick, but it was heavy—surprisingly heavy. There were a lot of pages—I shuffled through hundreds of closely written sheets and yet the book was less than half used. I read bits here and there:

"May 4, 1746. The Voyage waf not a Succesfs. I muft forfake thif ,avenue of Enquiry. . . ."

"October 23, 1790. Buildded the weft Barrier a cubit higher. Now the fires burn every night. Is there no limit to their infernal perfittence?"

"January 19, 1831. I have great hopes for the Philadelphia enterprise. My greatest foe is impatience. All preparations for the Change are made, yet I confess I am uneasy . . ."

THERE are plenty of oddities," I said. "Aside from the entries themselves. This is supposed to be old—but the quality of the paper and binding beats anything I've seen. And that handwriting is pretty fancy for a quill pen—"

"There's a stylus clipped to the spine of the book," Foster said. "It was written with that."

I looked, pulled out a slim pen, then looked at Foster. "Speaking of odd," I said. "A genuine antique early colonial ball-point pen doesn't turn up every day—"

"Suspend your judgment until you've seen it all," Foster said.

"And two hundred years on one refill—that's not bad." I rifled through the pages, tossed the book onto the table. "Who's kidding who, Foster?" I said.

"The book was described in detail in the official record, of which I have copies. They mention the paper and binding, the stylus, even quote some of the entries. The authorities worked over it pretty closely, trying to identify me. They reached the same conclusion as you—that it was the work of a crackpot; but they saw the same book you're looking at now."

"So what? So it was faked up some time during the war—what does that prove? I'm ready to concede it's sixteen years old—"

"You don't understand, Legion," Foster said. "I told you I work up in a military hospital in France. But it was an AEF hospital and the year was 1918."

## CHAPTER II

I POURED myself some more beer and glanced sideways at Foster. He didn't look like a nut . . .

"All I've got to say is," I said, "you're a hell of a spry-looking seventy."

"You find my appearance

strangely youthful. What would be your reaction if I told you that I've aged greatly in the past few months? That a year ago I could have passed as no older than thirty without the slightest difficulty—"

"I don't think I'd believe you," I said. "And I'm sorry, Mr. Foster; but I don't believe the bit about the 1918 hospital either. How can I? It's—"

"I know. Fantastic. But let's go back a moment to the book itself. Look closely at the paper; it's been examined by experts. They're baffled by it. Attempts to analyze it chemically failed—they were unable to take a sample. It's impervious to solvents—"

"They couldn't get a sample?" I said. "Why not just tear off the corner of one of the sheets?"

"Try it," Foster said.

I picked up the book and plucked at the edge of one of the blank sheets, then pinched harder and pulled. The paper held. I got a better grip and pulled again. It was like fine, tough leather, except that it didn't even stretch.

"It's tough, all right," I said. I took out my pocket knife and opened it and worked on the edge of the paper. Nothing. I went over to the bureau and put the paper flat against the top and sawed at it, putting my weight on the knife. I raised the knife

and brought it down hard. I didn't so much as mark the sheet. I put the knife away.

"That's some paper, Mr. Foster," I said.

"Try to tear the binding," Foster said. "Put a match to it. Shoot at it if you like. Nothing will make an impression on that material. Now, you're a logical man, Legion. Is there something here outside ordinary experience or is there not?"

I sat down, feeling for a cigarette. I still didn't have one.

"What does it prove?" I said.

"Only that the book is not a simple fraud. You're facing something which can't be dismissed as fancy. The book exists. That is our basic point of departure."

"Where do we go from there?"

"There is a second factor to be considered," Foster went on. "At some time in the past I seem to have made an enemy. Someone, or something, is systematically hunting me."

I TRIED a laugh, but it felt out of place. "Why not sit still and let it catch up with you? Maybe it could tell you what the whole thing is about."

Foster shook his head. "It started almost thirty years ago," he said. "I was driving south from Albany, New York, at night. It was a long straight stretch of road, no houses. I no-

ticed lights following me. Not headlights—something that bobbed along, off in the fields along the road. But they kept pace, gradually moving alongside. Then they closed in ahead, keeping out of range of my headlights. I stopped the car. I wasn't seriously alarmed, just curious. I wanted a better look, so I switched on my spotlight and played it on the lights. They disappeared as the light touched them. After half a dozen were gone the rest began closing in. I kept picking them off. There was a sound, too, a sort of high-pitched humming. I caught a whiff of sulphur then, and suddenly I was afraid—deathly afraid. I caught the last one in the beam no more than ten feet from the car. I can't describe the horror of the moment—"

"It sounds pretty weird," I said. "But what was there to be afraid of? It must have been some kind of heat lightning."

"There is always the pat explanation," Foster said. "But no explanation can rationalize the instinctive dread I felt. I started up the car and drove on—right through the night and the next day. I sensed that I must put distance between myself and whatever it was I had met. I bought a home in California and tried to put the incident out of my mind—with limited success. Then it happened again."

"The same thing? Lights?"

"It was more sophisticated the next time. It started with interference—static—on my radio. Then it affected the wiring in the house. All the lights began to glow weakly, even though they were switched off. I could feel it—feel it in my bones—moving closer, hemming me in. I tried the car; it wouldn't start. Fortunately, I kept a few horses at that time. I mounted and rode into town—and at a fair gallop, you may be sure. I saw the lights, but out-distanced them. I caught a train and kept going."

"I don't see—"

"It happened again; four times in all. I thought perhaps I had succeeded in eluding it at last. I was mistaken. I have had definite indications that my time here is drawing to a close. I would have been gone before now, but there were certain arrangements to be made."

"Look," I said. "This is all wrong. You need a psychiatrist, not an ex-tough guy. Delusions of persecution—"

It seemed obvious that the explanation was to be found somewhere in my past life," Foster went on. "I turned to the notebook, my only link. I copied it out, including the encrypted portion. I had photostatic enlargements made of the initial section—the part written in un-

familiar characters. None of the experts who have examined the script have been able to identify it.

"I necessarily, therefore, concentrated my attention on the last section—the only part written in English. I was immediately struck by a curious fact I had ignored before. The writer made references to an Enemy, a mysterious 'they,' against which defensive measures had to be taken."

"Maybe that's where you got the idea," I said. "When you first read the book—"

"The writer of the log," Foster said, "was dogged by the same nemesis that now follows me."

"It doesn't make any sense," I said.

"For the moment," Foster said, "stop looking for logic in the situation. Look for a pattern instead."

"There's a pattern, all right," I said.

"The next thing that struck me," Foster went on, "was a reference to a loss of memory—a second point of some familiarity to me. The writer expresses frustration at the inability to remember certain facts which would have been useful to him in his pursuit."

"What kind of pursuit?"

"Some sort of scientific project, as nearly as I can gather.

The journal bristles with tantalizing references to matters that are never explained."

"And you think the man that wrote it had amnesia?"

"Not actually amnesia, perhaps," Foster said. "But there were things he was unable to remember."

"If that's amnesia, we've all got it," I said. "Nobody's got a perfect memory."

"But these were matters of importance; not the kind of thing that simply slip one's mind."

"I can see how you'd want to believe the book had something to do with your past, Mr. Foster," I said. "It must be a hard thing, not knowing your own life story. But you're on the wrong track. Maybe the book is a story you started to write—in code, so nobody would accidentally read the stuff and kid you about it."

"Legion, what was it you planned to do when you got to Miami?"

The question caught me a little off-guard. "Well, I don't know," I hedged. "I wanted to get south, where it's warm. I used to know a few people—"

"In other words, nothing," Foster said. "Legion, I'll pay you well to stay with me and see this thing through."

I shook my head. "Not me, Mr. Foster. The whole thing sounds

—well, the kindest word I can think of is 'nutty'."

"Legion," Foster said, "do you really believe I'm insane?"

"Let's just say this all seems a little screwy to me, Mr. Foster."

"I'm not asking you just to work for me," Foster said. "I'm asking for your help."

"You might as well look for your fortune in tea leaves," I said, irritated. "There's nothing in what you've told me."

THERE'S more, Legion. Much more. I've recently made an important discovery. When I know you're with me, I'll tell you. You know enough now to accept the fact that this isn't entirely a figment of my imagination."

"I don't know anything," I said. "So far it's all talk."

"If you're concerned about payment—"

"No, damn it," I barked.

"Where are the papers you keep talking about? I ought to have my head examined for sitting here humoring you. I've got troubles enough—" I stopped talking and rubbed my hands over my scalp. "I'm sorry, Mr. Foster," I said. "I guess what's really griping me is that you've got everything I think I want—and you're not content with it. It bothers me to see you off chasing fairies. If a man with his health and plenty of money can't

enjoy life, what the hell is there for anybody?"

Foster looked at me thoughtfully. "Legion, if you could have anything in life you wanted, what would you ask for?"

I swirled the beer in the mug. "Anything? I've wanted a lot of different things. Once I wanted to be a hero. Later, I wanted to be smart, know all the answers. Then I had the idea that a chance to do an honest job, one that needed doing, was the big thing. I never found that job. I never got smart either, or figured out how to tell a hero from a coward, without a program."

"In other words," Foster said, "you were looking for an abstraction to believe in—in this case, Justice. But you won't find justice in nature. It's a thing that only man expects or acknowledges."

"There are some good things in life; I'd like to get a piece of them."

"Don't lose your capacity for dreaming, in the process."

"Dreams?" I said. "Oh, I've got those. I want an island somewhere in the sun, where I can spend my time fishing and watching the sea and working my way through a carefully selected harem and an even more carefully selected wine cellar."

"You're speaking cynically—but you're still attempting to concretize an abstraction," Fos-

ter said. "But no matter—materialism is simply another form of idealism."

I looked at Foster. "But I know I'll never have those things—or that Justice you were talking about, either. Once you really know you'll never make it . . ."

"Perhaps unattainability is an essential element of any dream," Foster said. "But hold onto your dream, whatever it is—don't ever give it up."

"So much for philosophy," I said. "Where is it getting us?"

"You'd like to see the papers," Foster said. He fished a key ring from an inner pocket. "If you don't mind going out to the car," he said, "and perhaps getting your hands dirty, there's a strong-box welded to the frame. I keep photostats of everything there, along with my passport, emergency funds, and so on. I've learned to be ready to travel on very short notice. Lift the floorboards; you'll see the box."

"It's not all that urgent," I said. "I'll take a look in the morning—after I've caught up on some sleep. But don't get the wrong idea—it's just my knot-headed curiosity."

"Very well," Foster said. He lay back, sighed. "I'm tired, Legion," he said. "My mind is tired."

"Yeah," I said, "so is mine—not to mention other portions of my anatomy."

"Get some sleep," Foster said. "We'll talk again in the morning."

I PUSHED back the light blanket and slid out of bed. Underfoot, the rug was as thick and soft as mink. I went across to the closet and pushed the button that made the door slide aside. My old clothes were still lying on the floor where I had left them, but I had the clean ones Foster had lent me. He wouldn't mind if I borrowed them for awhile longer—it would be cheaper for him in the long run. Foster was as looney as a six-day bike racer, but there was no point in my waiting around to tell him so.

The borrowed outfit didn't include a coat. I thought of putting my old jacket on but it was warm outside and a grey pin-stripe with grease spots wouldn't help the picture any. I transferred my personal belongings from the grimy clothes on the floor, and eased the door open.

Downstairs, the curtains were drawn in the living room. I could vaguely make out the outline of the bar. It wouldn't hurt to take along a bite to eat. I groped my way behind the bar, felt along the shelves, found a stack of small cans that rattled softly. Nuts, probably. I reached to put a can on the bar and it clattered against something I couldn't see. I swore silently, felt

over the obstruction. It was bulky, with the cold smoothness of metal, and there were small projections with sharp corners. It felt for all the world like—

I leaned over it and squinted. With the faint gleam of moonlight from a chink in the heavy curtains falling just so, I could almost make out the shape; I crouched a little lower, and caught the glint of light along the perforated jacket of a .30 calibre machine gun. My eye followed the barrel, made out the darker square of the entrance hall, and the tiny reflection of light off the polished brass door-knob at the far end.

I stepped back, flattened against the wall, with a hollow feeling inside. If I had tried to walk through that door. . . .

Foster was crazy enough for two ordinary nuts. My eyes flicked around the room. I had to get out quickly before he jumped out and said Boo and I died of heart-failure. The windows, maybe. I came around the end of the bar, got down and crawled under the barrel of the gun, and over to the heavy drapes, pushed them aside. Pale light glowed beyond the glass. Not the soft light of the moon, but a milky, churning glow that reminded me of the phosphorescence of sea water. . . .

I dropped the curtain, ducked back under the gun into the hall.

and pushed through a swinging door into the kitchen. There was a faint glow from the luminous handle of the refrigerator. I yanked it open, spilling light on the floor, and looked around. Plenty of gleaming white fixtures—but no door out. There was a window, almost obscured by leaves. I eased it open and almost broke my fist on a wrought iron trellis.

BACK in the hall, I tried two more doors, both locked. A third opened, and I found myself looking down the cellar stairs. They were steep and dark like cellar stairs always seem to be but they might be the way out. I felt for a light switch, flipped it on. A weak illumination showed me a patch of damp-looking floor at the foot of the steps. It still wasn't inviting, but I went down.

There was an oil furnace in the center of the room, with dusty duct work spidering out across the ceiling; some heavy packing cases of rough wood were stacked along one wall, and at the far side of the room there was a boarded-up coal bin—but no cellar door.

I turned to go back up and heard a sound and froze. Somewhere a cockroach scuttled briefly. Then I heard the sound again: a faint grinding of stone against stone. I peered through

the cob-webbed shadows, my mouth suddenly dry. There was nothing.

The thing for me to do was to get up the stairs fast, batter the iron trellis out of that kitchen window, and run like hell. The trouble was, I had to move to do it, and the sound of my own steps was so loud it was paralyzing. Compared to this, the shock of stumbling over the gun was just a mild kick. Ordinarily I didn't believe in things that went bump in the night, but this time I was hearing the bumps myself, and all I could think about was Edgar Allan Poe and his cheery tales about people who got themselves buried before they were thoroughly dead.

There was another sound, then a sharp snap, and I saw light spring up from a crack that opened across the floor in the shadowy corner. That was enough for me. I jumped for the stairs, took them three at a time, and banged through the kitchen door. I grabbed up a chair, swung it up, and slammed it against the trellis. It bounced back and cracked me across the mouth. I dropped it, tasting blood. Maybe that was what I needed. The panic faded before a stronger emotion—anger. I turned and barged along the dark hall to the living room—and lights suddenly went on. I



whirled and saw Foster standing in the hall doorway, fully dressed.

"OK, Foster!" I yelled. "Just show me the way out of here."

Foster held my eyes, his face tense. "Calm yourself, Mr. Legion," he said softly. "What happened here?"

"Get over there to that gun," I snapped, nodding toward the .30 calibre on the bar. "Disarm it, and then get the front door open. I'm leaving."

Foster's eyes flicked over the clothes I was wearing. "So I see," he said. He looked me in the face again. "What is it that's frightened you, Legion?"

"Don't act so damned innocent," I said. "Or am I supposed to get the idea the brownies set up that booby trap while you were asleep?"

His eyes went to the gun and his expression tightened. "It's mine," he said. "It's an automatic arrangement. Something's activated it—and without sounding my alarm. You haven't been outside, have you?"

"How could I—"

"This is important, Legion," Foster rapped. "It would take more than the sight of a machine gun to panic you. What have you seen?"

"I was looking for a back door," I said. "I went down to the cellar. I didn't like it down there so I came back up."

"What did you see in the cellar?" Foster's face looked strained, colorless.

"It looked like . . ." I hesitated. "There was a crack in the floor, noises, lights. . . ."

"The floor," Foster said. "Certainly. That's the weak point." He seemed to be talking to himself.

I jerked a thumb over my shoulder. "Something funny going on outside your windows, too."

FOSTER looked toward the heavy hangings. "Listen carefully, Legion," he said. "We are in grave danger—both of us. It's fortunate you arose when you did. This house, as you must have guessed by now, is something of a fortress. At this moment, it is under attack. The walls are protected by some rather formidable defense. I can't say as much for the cellar floor; it's merely three feet of ferro-concrete. We'll have to go now—very swiftly, and very quietly."

"OK—show me," I said. Foster turned and went back along the hall to one of the locked doors, pressed something. The door opened and I followed him inside a small room. He crossed to a blank wall, pressed against it. A panel slid aside—and Foster jumped back.

"God's wounds!" he gasped.

He threw himself at the wall, and panel closed. I stood stock still; from somewhere there was a smell like sulphur.

"What the hell goes on?" I said. My voice cracked, like it always does when I'm scared.

"That odor!" Foster said. "Quickly—the other way!"

I stepped back and Foster pushed past me and ran along the hall, with me at his heels. I didn't look back to see what was at my own heels. Foster took the stairs three at a time, pulled up short on the landing. He went to his knees, shoved back an Isfahan rug as supple as sable, and gripped a steel ring set in the floor. He looked at me, his face white.

"Invoke thy gods," he said hoarsely, and heaved at the ring. A section of floor swung up, showing the first step of a flight leading down into a black hole. Foster didn't hesitate; he dropped his feet in, scrambled down. I followed. The stairs went down about ten feet, ending on a stone floor. There was the sound of a latch turning, and we stepped out into a larger room. I saw moonlight through a row of high windows, and smelled the fragrance of fresh night air.

"We're in the garage," Foster whispered. "Go around to the other side of the car and get in—quietly." I touched the smooth

flank of the rakish cabriolet, felt my way around it, and eased the door open. I slipped into the seat and closed the door gently. Beside me, Foster touched a button and a green light glowed in the dash.

"Ready?" he said.

"Sure."

The starter whined half a turn and the engine caught, and without waiting, Foster gunned it, let in the clutch. The car leaped for the closed doors, and I ducked, then saw the doors snap aside as the low-slung car roared out into the night. We took the first turn in the drive at forty, and rounded onto the highway at sixty, tires screaming. I took a look back, and caught a glimpse of the house, its stately facade white in the moonlight—and then we were out of sight.

"What's it all about?" I called over the rush of air. The needle touched ninety, kept going.

"Later," Foster barked. I didn't feel like arguing. I watched the mirror for a few minutes, wondering where all the cops were tonight. Then I settled down in the padded seat and watched the speedometer eat up the miles.

### CHAPTER III

IT was nearly four-thirty and a tentative grey streak showed through the palm fronds to the

and before I broke the silence.

By the way," I said. "What about the routine with the steel cutters and the bullet-proof glass in the kitchen, and the handy home model machine gun covering the front door? Mice and around the place, are they?"

"Those things were necessary and more."

"Now that the short hairs along my spine have relaxed," I said, "The whole thing looks pretty silly. We've run far enough now to be able to stop and turn around and stick our tongues out."

"Not yet—not for a while."

"Why don't we just go back home," I went on, "and—"

"No!" Foster said sharply. "I want your word on that, Legion. No matter what—don't ever go near that house again."

"It'll be daylight soon," I said. "We'll feel pretty asinine about this little trip after the sun comes up, but don't worry, I won't tell anybody—"

"We've got to keep moving," Foster said. "At the next town, I'll telephone for seats on a flight from Miami."

"Hold on," I said. "You're raving. What about your house? We didn't even stick around long enough to make sure the TV was turned off. And what about passports, and money, and luggage? And what makes you think I'm going with you?"

"I've kept myself in readiness for this emergency," Foster said. "There are disposition instructions for the house on file with a legal firm in Jacksonville. There is nothing to connect me with my former life, once I've changed my name and disappeared. As for the rest—we can buy luggage in the morning. My passport is in the car; perhaps we'd better go first to Puerto Rico, until we can arrange for one for you."

"Look," I said. "I got spooked in the dark; that's all. Why not just admit we made fools of ourselves?"

Foster shook his head. "The inherent inertia of the human mind," he said. "How it fights to resist new ideas."

"The kind of new ideas you're talking about could get both of us locked up in the chuckle ward," I said.

"Legion," Foster said, "I think you'd better write down what I'm going to tell you. It's important—vitally important. I won't waste time with preliminaries. The notebook I showed you—it's in my jacket. You must read the English portion of it. Afterwards, what I'm about to say may make more sense."

"I hope you don't feel your last will and testament coming on, Mr. Foster," I said. "Not before you tell me what that was we were both so eager to get away from."

"I'll be frank with you," Foster said flatly. "I don't know."

FOSTER wheeled into the dark drive of a silent service station, eased to a stop, set the brake, and slumped back in the seat.

"Do you mind driving for a while, Legion?" he said. "I'm not feeling very well."

"Sure, I'll drive," I said. I opened the door and got out and went around to his side. Foster sat limply, eyes closed, his face drawn and strained. He looked older than he had last night—years older. The night's experiences hadn't taken anything off my age, either.

Foster opened his eyes, looked at me blankly. He seemed to gather himself with an effort. "I'm sorry," he said. "I'm not myself."

He moved over and I got in the driver's seat. "If you're sick," I said, "we'd better find a doctor."

"No, it's all right," he said blurrily. "Just keep going. . . ."

"We're a hundred and fifty miles from Mayport now," I said.

Foster turned to me, started to say something—and slumped in a dead faint. I grabbed for his pulse; it was strong and steady. I rolled up an eyelid and a dilated pupil stared sightlessly. He was all right—I hoped. But the thing to do was get him

in bed and call a doctor. We were at the edge of a small town. I let the brake off and drove slowly into town, swung around the corner and pulled in in front of the sagging marquee of a run-down hotel. Foster stirred as I cut the engine.

"Foster," I said. "I'm going to get you into a bed. Can you walk?" He groaned softly and opened his eyes. They were glassy. I got out and got him to the sidewalk. He was still half out. I walked him into the dingy lobby and over to a reception counter where a dim bulb burned. I dinged the bell. It was a minute before an old man shuffled out from where he'd been sleeping. He yawned, eyed me suspiciously, looked at Foster.

"We don't want no drunks here," he said. "Respectable house."

"My friend is sick," I said. "Give me a double with bath. And call a doctor."

"What's he got?" the old man said. "Ain't contagious, is it?"

"That's what I want a doctor to tell me."

"I can't get the doc 'fore in the morning. And we got no private bathrooms."

I signed the register and we rode the open-cage elevator to the fourth floor and went along a gloomy hall to a door painted a peeling brown. It didn't look

inviting; the room inside wasn't much better. There was a lot of flowered wallpaper and an old-fashioned wash stand, and two wide beds. I stretched Foster out on one. He lay relaxed, a serene expression on his face—the kind undertakers try for but never quite seem to manage. I sat down on the other bed and pulled off my shoes. It was my turn to have a tired mind. I lay on the bed and let it sink down like a grey stone into still water.

I AWOKE from a dream in which I had just discovered the answer to the riddle of life. I tried to hold onto it, but it slipped away; it always does.

Grey daylight was filtering through the dusty windows. Foster lay slackly on the broad sagging bed, a ceiling lamp with a faded fringed shade casting a sickly yellow light over him. It didn't make things any cheerier; I flipped it off.

Foster was lying on his back, arms spread wide, breathing heavily. Maybe it was only exhaustion and he didn't need a doctor after all. He'd probably wake up in a little while, raring to go. As for me, I was feeling hungry again. I'd have to have a buck or so for sandwiches. I went over to the bed and called Foster's name. He didn't move. If he was sleeping that soundly, maybe I wouldn't bother him.

I eased his wallet out of his coat pocket, took it to the window and checked it. It was fat. I took a ten, put the wallet on the table. I remembered Foster had said something about money in the car. I had the keys in my pocket. I got my shoes on and let myself out quietly. Foster hadn't moved.

Down on the street, I waited for a couple of yokels who were looking over Foster's car to move on, then slid into the seat, leaned over and got the floorboards up. The strong box was set into the channel of the frame. I scraped the road dirt off the lock and opened it with a key from Foster's key-ring, took out the contents. There was a bundle of stiffish papers, a passport, some maps—marked up—and a wad of currency that made my mouth go dry. I rifled through it; fifty grand if it was a buck.

I stuffed the papers, the money and the passport back in the box and locked it, and climbed out onto the sidewalk. A few doors down the street there was a dirty window lettered MAE'S EAT. I went in, ordered hamburgers and coffee to go, and sat at the counter with Foster's keys in front of me, and thought about the car that went with them. The passport only needed a little work on the picture to get me wherever I wanted to go, and the money

would buy me my choice of islands. Foster would have a nice long nap, and then take a train home. With his dough, he'd hardly miss what I took.

THE counterman put a paper bag in front of me and I paid him and went out. I stood by the car, jingling the keys on my palm and thinking. I would be in Miami in an hour, and I knew where to go for the passport job. Foster was a nice guy, and I liked him—but I'd never have a break like this again. I reached for the car door and a voice said, "Paper, Mister?"

I jumped and looked around. A dirty-faced kid was looking at me.

"Sure," I said. I gave him a single and took the paper, flipped it open. A Mayport date-line caught my eye:

"Police Raid Hideout. A surprise raid by local police led to the discovery here today of a secret gangland fortress. Chief Chesters of the Mayport Police stated that the raid came as an aftermath of the arrival in the city yesterday of a notorious northern gang member. A number of firearms, including army-type machine guns, were seized in the raid on a house 9 miles from Mayport on the Fernandina road. The raid was said by Chief Chesters to be the culmina-

tion of a lengthy investigation. C. R. Foster, 50, owner of the property, is missing and feared dead. Police are seeking an ex-convict who visited the house last night. Chief Chesters stated that Foster may have been the victim of a gangland murder."

I BANGED through the door to the darkened room and stopped short. In the gloom I could see Foster sitting on the edge of my bed, looking my way.

"Look at this," I yelled, flipping the paper in his face. "Now the cops are dragging the state for me—and on a murder rap at that! Get on the phone and get this thing straightened out—if you can. You and your little green men! The cops think they've stumbled on Al Capone's arsenal. You'll have fun explaining that one. . . ."

Foster looked at me interestedly. He smiled.

"What's funny about it, Foster?" I yelled. "Your dough may buy you out, but what about me?"

"Forgive me for asking," Foster said pleasantly. "But—who are you?"

There are times when I'm slow on the uptake, but this wasn't one of them; the implications of what Foster had said hit me

hard enough to make my knees go weak.

"Oh, no, Mr. Foster," I said. "You can't lose your memory again—not right now, not with the police looking for me. You're my alibi; you're the one that has to explain all the business about the guns and the ad in the paper. I just came to see about a job, remember?"

My voice was getting a little shrill. Foster sat looking at me, wearing an expression between a frown and a smile, like a credit manager turning down an application.

He shook his head slightly. "My name is not Foster."

"Look," I said. "Your name was Foster yesterday—that's all I care about. You're the one that owns the house the cops are all upset about. And you're the corpse I'm supposed to have knocked off. You've got to go to the cops with me—right now—and tell them I'm just an innocent bystander."

I went to the window and raised the shades to let some light into the room, turned back to Foster.

"I'll explain to the cops about you thinking the little men were after you—" I stopped talking and stared at Foster. For a wild moment I thought I'd made a mistake—that I'd wandered into the wrong room. I knew Foster's face, all right; the light was

bright enough now to see clearly; but the man I was talking to couldn't have been a day over twenty years old.

I WENT close to him, staring hard. There were the same cool blue eyes, but the lines around them were gone. The black hair grew lower and thicker than I remembered it, and the skin was clear and vibrant.

I sat down hard on my bed. "Mama mia," I said.

"¿Que es la dificultad?" Foster said.

"Shut up," I moaned. "I'm confused enough in one language." I was trying hard to think but I couldn't seem to get started. A few minutes earlier I'd had the world by the tail—just before it turned around and bit me. Cold sweat popped out on my forehead when I thought about how close I had come to driving off in Foster's car; every cop in the state would be looking for it by now—and if they found me in it, the jury wouldn't be ten minutes reaching a verdict of guilty.

Then another thought hit me—the kind that brings you bolt upright with your teeth clenched and your heart hammering. It wouldn't be long before the local hick cops would notice the car out front. They'd come in after me, and I'd tell them it belonged to Foster. They'd take a look at

him and say, nuts, the bird we want is fifty years old, and where did you hide the body?

I got up and started pacing. Foster had already told me there was nothing to connect him with his house in Mayport; the locals there had seen enough of him to know he was pushing middle age, at least. I could kick and scream and tell them this twenty year-old kid was Foster, but I'd never make it stick. There was no way to prove my story; they'd figure Foster was dead and that I'd killed him—and anybody who thinks you need a *corpus* to prove murder better read his Perry Mason again.

I glanced out of the window and did a double-take. Two cops were standing by Foster's car. One of them went around to the back and got out a pad and took down the license number, then said something over his shoulder and started across the street. The second cop planted himself by the car, his eye on the front of the hotel.

I whirled on Foster. "Get your shoes on," I croaked. "Let's get the hell out of here."

We went down the stairs quietly and found a back door opening on an alley. Nobody saw us go.

**A**N hour later, I sagged in a grimy coach seat and studied Foster, sitting across from me—

a middle-aged nut with the face of a young kid and a mind like a blank slate. I had no choice but to drag him with me; my only chance was to stick close and hope he got back enough of his memory to get me off the hook.

It was time for me to be figuring my next move. I thought about the fifty thousand dollars I had left behind in the car, and groaned. Foster looked concerned.

"Are you in pain?" he said.

"And how I'm in pain," I said. "Before I met you I was a homeless bum, broke and hungry. Now I can add a couple more items: the cops are after me, and I've got a mental case to nursemaid."

"What law have you broken?" Foster said.

"None, damn it," I barked. "As a crook, I'm a washout. I've planned three larcenies in the last twelve hours, and flunked out on all of them. And now I'm wanted for murder."

"Whom did you kill?" Foster enquired courteously.

I leaned across so I could snarl in his face: "You!" Then, "Get this through your head, Foster. The only crime I'm guilty of is stupidity. I listened to your crazy story; because of you I'm in a mess I'll never get straightened out." I leaned back. "And then there's the question of old men that take a nap and



wake up in their late teens; we'll go into that later, after I've had my nervous breakdown."

"I'm sorry if I've been the cause of difficulty," Foster said. "I wish that I could recall the things you've spoken of. Is there anything I can do to assist you now?"

"And you were the one who wanted help," I said. "There is one thing; let me have the money you've got on you; we'll need it."

Foster got out his wallet, after I told him where it was, and handed it to me. I looked through it; there was nothing in it with a photo or fingerprints. When Foster said he had arranged matters so that he could disappear without a trace, he hadn't been kidding.

"We'll go to Miami," I said. "I know a place in the Cuban section where we can lie low, cheap. Maybe if we wait a while, you'll start remembering things."

"Yes," Foster said. "That would be pleasant."

YOU haven't forgotten how to talk, at least," I said. "I wonder what else you can do. Do you remember how you made all that money?"

"I can remember nothing of your economic system," Foster said. He looked around. "This is a very primitive world, in many

respects. It should not be difficult to amass wealth here."

"I never had much luck at it," I said. "I haven't even been able to amass the price of a meal."

"Food is exchanged for money?" Foster asked.

"Everything is exchanged for money," I said. "Including most of the human virtues."

"This is a strange world," Foster said. "It will take me a long while to become accustomed to it."

"Yeah, me, too," I said. "Maybe things would be better on Mars."

Foster nodded. "Perhaps," he said. "Perhaps we should go there."

I groaned, then caught myself. "No, I'm not in pain," I said. "But don't take me so literally, Foster."

We rode along in silence for a while.

"Say, Foster," I said. "Have you still got that notebook of yours?"

Foster tried several pockets, came up with the book. He looked at it, turned it over, frowning.

"You remember it?" I said, watching him.

He shook his head slowly, then ran his finger around the circles embossed on the cover.

"This pattern," he said. "It signifies. . . ."

"Go on, Foster," I said. "Signifies what?"

"I'm sorry," he said. "I don't remember."

I took the book and sat looking at it. It wouldn't do any good to turn myself in and tell them the whole story; they wouldn't believe me, and I wouldn't blame them. I didn't really believe it myself, and I'd lived through it. But then, maybe I was just imagining that Foster looked younger. After all, a good night's rest—

I looked at Foster, and almost groaned again. Twenty was stretching it; eighteen was more like it. I was willing to swear he'd never shaved in his life.

"Foster," I said. "It's got to be in this book. Who you are, where you came from—It's the only hope I've got."

"I suggest we read it, then," Foster said.

"A bright idea," I said. "Why didn't I think of that?" I thumbed through the book to the section in English and read for an hour. Starting with the entry dated January 19, 1710, the writer had scribbled a few lines every few months. He seemed to be some kind of pioneer in the Virginia Colony. He bitched about prices, and the Indians, and the ignorance of the other settlers, and every now and then threw in a remark about the Enemy. He often took long trips,

and when he got home, he bitched about those, too.

"It's a funny thing, Foster," I said. "This is supposed to have been written over a period of a couple of hundred years, but it's all in the same hand. That's kind of odd, isn't it?"

"Why should a man's handwriting change?" Foster said.

"Well, it might get a little shaky there toward the last, don't you agree?"

"Why is that?"

"I'll spell it out, Foster," I said. "Most people don't live that long. A hundred years is stretching it, to say nothing of two."

"This must be a very violent world, then," Foster said.

"Skip it," I said. "You talk like you're just visiting. By the way; do you remember how to write?"

Foster looked thoughtful. "Yes," he said. "I can write."

I handed him the book and the stylus. "Try it," I said. Foster opened to a blank page, wrote, and handed the book back to me.

"Always and always and always," I read.

I looked at Foster. "What does that mean?" I looked at the words again, then quickly flipped to the pages written in English. I was no expert on penmanship, but this came up and cracked me right in the eye.

The book was written in Foster's hand.

"It doesn't make sense," I was saying for the fortieth time. Foster nodded sympathetic agreement.

"Why would you write this yourself, and then spend all that time and money trying to have it deciphered? You said experts worked on it and couldn't break it. But," I went on, "you must have known you wrote it; you knew your own handwriting. But on the other hand, you had amnesia before; you had the idea you might have told something about yourself in the book . . ."

I sighed, leaned back and tossed the book over to Foster. "Here, you read awhile," I said. "I'm arguing with myself and I can't tell who's winning."

Foster looked the book over carefully.

"This is odd," he said.

"What's odd?"

"The book is made of khaff. It is a permanent material—and yet it shows damage."

I sat perfectly still and waited.

"Here on the back cover," Foster said. "A scuffed area. Since this is khaff, it cannot be an actual scar. It must have been placed there."

I grabbed the book and looked. There was a faint mark across the back cover, as though the book had been scraped on something sharp. I remembered how much luck I had had with a knife. The mark had been put

here, disguised as a casual nick in the finish. It had to mean something.

"How do you know what the material is?" I asked.

Foster looked surprised. "In the same way that I know the window is of glass," he said. "I simply know."

"Speaking of glass," I said. "Wait till I get my hands on a microscope. Then maybe we'll begin to get some answers."

#### CHAPTER IV

THE two-hundred pound señorita put a pot of black Cuban coffee and a pitcher of salted milk down beside the two chipped cups, leered at me in a way that might have been appealing thirty years before, and waddled back to the kitchen. I poured a cup, gulped half of it, and shuddered. In the street outside the cafe a guitar cried *Estrellita*.

"Okay, Foster," I said. "Here's what I've got: The first half of the book is in pot-hooks—I can't read that. But this middle section: the part coded in regular letters—it's actually encrypted English. It's a sort of resumé of what happened." I picked up the sheets of paper on which I had transcribed my deciphering of the coded section of the book, using the key that had been micro-engraved in the fake

scratch on the back cover.  
I read:

"For the first time, I am afraid. My attempt to construct the communicator called down the Hunters upon me. I made such a shield as I could contrive, and sought their nesting place.

"I came there and it was in that place that I knew of old, and it was no hive, but a pit in the ground, built by men of the Two Worlds. And I would have come into it, but the Hunters swarmed in their multitudes. I fought them and killed many, but at the last I fled away. I came to the western shore, and there I hired bold sailors and a poor craft, and set forth.

"In forty-nine days we came to shore in this wilderness, and here were men as from the dawn of time, and I fought them, and when they had learned fear, I lived among them in peace, and the Hunters have not found this place. Now it may be that my saga ends here, but I will do what I am able.

"The Change may soon come upon me; I must prepare for the stranger who will come after me. All that he must know is in these pages. And I say to him:

"Have patience, for the time of this race draws close. Ven-

ture not again on the Eastern continent, but wait, for soon the Northern sailors must come in numbers into this wilderness. Seek out their cleverest metal-workers, and when it may be, devise a shield, and only then return to the pit of the Hunters. It lies in the plain, 50/10,000-parts of the girth of this (?) to the west of the Great Chalk Face, and 1470 parts north from the median line, as I reckon. The stones mark it well with the sign of the Two Worlds."

I LOOKED across at Foster. "It goes on then with a blow-by-blow account of dealings with aborigines. He was trying to get them civilized in a hurry. They figured he was a god and he set them to work building roads and cutting stone and learning mathematics and so on. He was doing all he could to set things up so this stranger who was to follow him would know the score, and carry on the good work."

Foster's eyes were on my face. "What is the nature of the Change he speaks of?"

"He never says—but I suppose he's talking about death," I said. "I don't know where the stranger is supposed to come from."

"Listen to me, Legion," Foster said. There was a hint of the old anxious look in his eyes. "I

think I know what the Change was. I think he knew he would forget—"

"You've got amnesia on the brain, old buddy," I said.

"—and the stranger is—himself. A man without a memory."

I sat frowning at Foster: "Yeah, maybe," I said. "Go on."

"And he says that all that the stranger needs to know is there—in the book."

"Not in the part I decoded," I said. "He describes how they're coming along with the road-building job, and how the new mine panned out—but there's nothing about what the Hunters are, or what had gone on before he tangled with them the first time."

"It must be there, Legion; but in the first section, the part written in alien symbols."

"Maybe," I said. "But why the hell didn't he give us a key to that part?"

"I think he assumed that the stranger—himself—would remember the old writing," Foster said. "How could he know that it would be forgotten with the rest?"

"Your guess is as good as any," I said. "Maybe better; you know how it feels to lose your memory."

"But we've learned a few things," Foster said. "The pit of the Hunters—we have the location."

"If you call this 'ten-thousand parts to the west of the chalk face' a location," I said.

"We know more than that." Foster said. "He mentions a plain; and it must lie on a continent to the east—"

"If you assume that he sailed from Europe to America, then the continent to the east would be Europe," I said. "But maybe he went from Africa to South America, or—"

"The mention of Northern sailors—that suggests the Vikings—"

"You seem to know a little history, Foster," I said. "You've got a lot of odd facts tucked away."

"We need maps," Foster said. "We'll look for a plain near the sea—"

"Not necessarily."

"—and with a formation called a chalk face to the east."

"What's this 'median line' business mean?" I said. "And the bit about ten thousand parts of something?"

"I don't know," Foster said. "But we must have maps."

"I bought some this afternoon," I said. "I also got a dime-store globe. I thought we might need them. What the hell! let's get out of this and back to the room, where we can spread out. I know it's a grim prospect, but . . ." I got to my feet, dropped some coins on the table, and led the way out.

[T was a short half block to the flea trap we called home. The roaches scurried as we passed up the dark stairway to our not much brighter room. I crossed to the bureau and opened a drawer.

"The globe," Foster said, taking it in his hands. "I wonder if perhaps he meant a ten-thousandth part of the circumference of the earth?"

"What would he know about —"

"Disregard the anachronistic aspect of it," Foster said. "The man who wrote the book knew many things. We'll have to start with some assumptions. Let's make the obvious ones: that we're looking for a plain on the west coast of Europe, lying—" He pulled a chair up to the scabrous table and riffled through to one of my scribbled sheets: "50/10,000s of the circumference of the earth—that would be about 125 miles—west of a chalk formation, and 3675 miles north of a median line. . . ."

"Maybe," I said, "he means the Equator."

"Certainly," Foster said. "Why not? That would mean our plain lies on a line through—" he studied the small globe. "Warsaw, and south of Amsterdam."

"But this bit about a rock outcropping," I said. "How do we find out if there's any conspicu-

ous chalk formation there?"

"We can consult a geology text," Foster said. "There may be a library nearby."

"The only chalk deposits I ever heard about," I said, "are the white cliffs of Dover."

"White cliffs. . . ."

We both reached for the globe at once.

"125 miles west of the chalk cliffs," Foster said. He ran a finger over the globe. "North of London, but south of Birmingham. That puts us reasonably near the sea—"

"Where's that atlas?" I said. I rummaged, came up with a cheap tourists' edition, flipped the pages.

"Here's England," I said. "Now we look for a plain."

Foster put a finger on the map. "Here," he said. "A large plain—called Salisbury."

"Large is right," I said. "It would take years to find a stone cairn on that. We're getting excited about nothing. We're looking for a hole in the ground, hundreds of years old—if this lousy notebook means anything—maybe marked with a few stones—in the middle of miles of plain. And it's all guesswork anyway. . . ." I took the atlas, turned the page.

"I don't know what I expected to get out of decoding those pages," I said. "But I was hoping for more than this."

"I think we should try, Legion," Foster said. "We can go there, search over the ground. It would be costly, but not impossible. We can start by gathering capital—"

"Wait a minute, Foster," I said. I was staring at a larger-scale map showing southern England. Suddenly my heart was thudding. I put a finger on a tiny dot in the center of Salisbury Plain.

"Six, two and even," I said. "There's your Pit of the Hunters. . . ."

Foster leaned over, read the fine print.

"Stonehenge."

I READ from the encyclopedia page:

"—this great stone structure, lying on the Plain of Salisbury, Wiltshire, England, is preeminent among megalithic monuments of the ancient world.

"Within a circular ditch 300' in diameter, stones up to 22' in height are arranged in concentric circles. The central altar stone, over 16' long, is approached from the northeast by a broad roadway called the Avenue—"

"It is not an altar," Foster said.

"How do you know?"

"Because—" Foster frowned.

"I know, that's all."

"The journal said the stones were arranged in the sign of the Two Worlds," I said. "That means the concentric circles, I suppose; the same thing that's stamped on the cover of the notebook."

"And the ring," Foster said.

"Let me read the rest," I said.

"A great sarsen stone stands upright in the Avenue; the axis through the two stones, when erected, pointed directly to the rising of the sun on Midsummer day. Calculations based on this observation indicate a date of approximately 1600 B.C."

Foster took the book and I sat on the window sill and looked out at a big Florida moon. I lit a cigarette, dragged on it, and thought about a man who long ago had crossed the North Atlantic in a dragon boat to be a god among the Indians. I wondered where he came from, and what it was he was looking for, and what kept him going in spite of the hell that showed in the spare lines of the journal he kept. If, I reminded myself, he had ever existed . . .

FOSTER was pouring over the book. "Look," I said. "Let's get back to earth. We have things to think about, plans to make. The fairy tales can wait until later."

"What do you suggest?" Foster said. "That we forget the things you've told me, and the things we've read here, discard the

journal, and abandon the attempt to find the answers?"

"No," I said. "I'm no sorehead. Sure, there's some things here that somebody ought to look into—some day. But right now what I want is the cops off my neck. And I've been thinking. I'll dictate a letter; you write it—your lawyers know your handwriting. Tell them you were on the thin edge of a nervous breakdown—that's why all the artillery around your house—and you made up your mind suddenly to get away from it all. Tell them you don't want to be bothered, that's why you're travelling incognito, and that the northern mobster that came to see you was just stupid, not a killer. That ought to at least cool off the cops—"

Foster looked thoughtful. "That's an excellent suggestion," he said. "Then we need merely to arrange for passage to England, and proceed with the investigation."

"You don't get the idea," I said. "You can arrange things by mail so we get our hands on that dough of yours—"

"Any such attempt would merely bring the police down on us," Foster said. "You've already pointed out the un wisdom of attempting to pass myself off as—myself."

"There ought to be a way. . . ." I said.

"We have only one avenue of inquiry," Foster said. "We have no choice but to explore it. We'll take passage on a ship to England—"

"What'll we use for money—and papers?" It would cost hundreds. Unless—" I added, "—we worked our way. But that's no good. We'd still need passports—plus union cards and seamen's tickets."

"Your friend," Foster said. "The one who prepares passports. Can't he produce the other papers as well?"

"Yeah," I said. "I guess so. But it will cost us."

"I'm sure we can find a way to pay," Foster said. "Will you see him—early in the morning?"

I looked around the blowsy room. Hot night air stirred a geranium wilting in a tin can on the window sill. An odor of bad cooking and worse plumbing floated up from the street.

"At least," I said, "it would mean getting out of here."

#### CHAPTER V

IT was almost sundown when Foster and I pushed through the door to the saloon bar at the Ancient Sinner and found a corner table. I ordered a pint of mild-and-bitter and watched Foster spread out his maps and papers. Behind us, there was a murmur of conversation, and the thump of darts against a board.



"When are you going to give up and admit we're wasting our time?" I said. "Two weeks of tramping over the same ground, and we end up in the same place; sitting in a country pub drinking warm beer."

"We've hardly begun our investigation," Foster said mildly.

"You keep saying that," I said. "But if there ever was anything in that rock-pile, it's long gone. The archaeologists have been digging over the site for years, and they haven't come up with anything."

"They didn't know what to look for," Foster said. "They were searching for indications of religious significance, human sacrifice—that sort of thing."

"We don't know what we're looking for either," I said. "Unless you think maybe we'll meet the Hunters hiding under a loose stone."

"You say that sardonically," Foster said. "But I don't consider it impossible."

"I know," I said. "You've convinced yourself that the Hunters were after us back at Mayport when we ran off like a pair of idiots."

"From what you've told me of the circumstances—" Foster began.

"I know; you don't consider it impossible. That's the trouble with you; you don't consider anything impossible. It would

make life a lot easier for me if you'd let me rule out a few items—like leprechauns who hang out at Stonehenge."

Foster looked at me, half-smiling. It had only been a few weeks since he woke up from a nap looking like a senior class president who hadn't made up his mind whether to be a preacher or a movie star but he had already lost that mild, innocent air. He learned fast, and day by day I had seen his old personality re-emerge and—in spite of my attempts to hold onto the ascendancy—dominate our partnership.

"It's a failing of your culture," Foster said, "that hypothesis becomes dogma almost overnight. You're too close to your neolithic, when the blind acceptance of tribal lore had survival value. Having learned to evoke the fire god from sticks, by rote, you tend to extend the principle to all 'established facts'."

"Here's an established fact for you," I said. "We've got fifteen pounds left—that's about forty dollars. It's time we figured out where to go from here, before somebody starts checking up on those phoney papers of ours."

Foster shook his head. "I'm not satisfied that we've exhausted the possibilities here. I've been studying the geometric relationships between the various structures; I have some ideas I want to check. I think it might be a

good idea to go out at night, when we can work without the usual crowd of tourists observing every move. We'll have a bite to eat here and wait until dark to start out."

THE publican brought us plates of cold meat and potato salad. I worked on a thin but durable slice of ham and thought about all the people, somewhere, who were sitting down now to gracious meals in the glitter of crystal and silver. I was getting farther from my island all the time—And it was nobody's fault but mine.

"The Ancient Sinner," I said "That's me."

Foster looked up. "Curious names these old pubs have," he said. "I suppose in some cases the origins are lost in antiquity."

"Why don't they think up something cheery," I said. "Like 'The Paradise Bar and Grill' or 'The Happy Hour Cafe'. Did you notice the sign hanging outside?"

"No."

"A picture of a skeleton. He's holding one hand up like a Yankee evangelist prophesying doom. You can see it through the window there."

Foster turned and looked out at the weathered sign creaking in the evening wind. He looked at it for a long time. There was a strange look around his eyes.

"What's the matter—?" I started.

Foster ignored me, waved to the proprietor, a short fat countryman. He came over to the table, wiping his hands on his apron.

"A very interesting old building," Foster said. "We've been admiring it. When was it built?"

"Well, sir," the publican said. "This here house is a many a hundred year old. It were built by the monks, they say, from the monastery what used to stand nearby here. It were tore down by the king's men, Henry, that was, what time he drove the papists out."

"That would be Henry the Eighth, I suppose?"

"Aye, it would that. And this house is all that were spared, it being the brewing-house, as the king said were a worthwhile institution, and he laid on a tithe, that two kegs of stout was to be laid by for the king's use each brewing time."

"Very interesting," Foster said. "Is the custom still continued?"

The publican shook his head. "It were ended in my granfer's time, it being that the queen were a tee-totaller."

"How did it acquire the curious name—'the Ancient Sinner'?"

"The tale is," the publican said, "that one day a lay brother of the order were digging about

yonder on the plain by the great stones, in search of the Druid's treasure, albeit the Abbott had forbid him to go nigh the heathen ground, and he come on the bones of a man, and being of a kindly turn, he had the thought to give them Christian burial. Now, knowing the Abbott would nae permit it, he set to work to dig a grave by moonlight in holy ground, under the monastery walls. But the Abbott, being wakeful, were abroad and come on the brother a-digging, and when he asked the why of it, the lay brother having visions of penances to burden him for many a day, he ups and tells the Abbott it were a ale cellar he were about digging, and the Abbott, not being without wisdom, clapped him on the back, and went on his way. And so it was the ale-house got built, and blessed by the Abbott, and with it the bones that was laid away under the floor beneath the ale-casks."

SO the ancient sinner is buried under the floor?"

"Aye, so the tale goes, though I've not dug for him meself. But the house has been knowed by the name these four hundred year."

"Where was it you said the lay brother was digging?"

"On the plain yonder, by the Druid's stones, what they call

Stonehenge," the publican said. He picked up the empty glasses. "What about another, gentlemen?"

"Certainly," Foster said. He sat quietly across from me, his features composed—but I could see there was tension under the surface calm.

"What's this all about?" I asked softly. "When did you get so interested in local history?"

"Later," Foster murmured. "Keep looking bored."

"That'll be easy," I said. The publican came back, placed heavy glass mugs before us.

"You were telling us about the lay brother finding the bones," Foster said. "You say they were buried in Stonehenge?"

The publican cleared his throat, glanced sideways at Foster.

"The gentlemen wouldna be from the University now, I suppose?" he said.

"Let's just say," Foster said easily, smiling, "that we have a great interest in these bits of lore—an interest supported by modest funds, of course."

The publican made a show of wiping at the rings on the table top.

"A costly business, I wager," he said. "Digging about in odd places and all. Now, knowing where to dig; that's important, I'll be bound."

"Very important," Foster said.

"Worth five pounds, easily."

"Twere my granfer told me of the spot; took me out by moonlight, he did, and showed me where his granfer had showed him. Told me it were a fine great secret, the likes of which a simple man could well take pride in."

"And an additional five pounds as a token of my personal esteem," Foster said.

The publican eyed me. "Well, a secret as was handed down father to son. . . ."

"And, of course, my associate wishes to express his esteem, too," Foster said. "Another five pounds worth."

"That's all the esteem the budget will bear, Mr. Foster," I said. I got out the fifteen pounds and passed the money across to him. "I hope you haven't forgotten those people back home who wanted to talk to us. They'll be getting in touch with us any time now, I'll bet."

FOSTER rolled up the bills and held them in his hand. "That's true, Mr. Legion," he said. "Perhaps we shouldn't take the time. . . ."

"But being it's for the advancement of science," the publican said, "I'm willing to make the sacrifice."

"We'll want to go out tonight," Foster said. "We have a very tight schedule."

The landlord dickered with Foster for another five minutes before he agreed to guide us to the spot where the skeleton had been found, as soon as the pub was closed for the night. He took the money and went back to the bar.

"Now tell me," I began.

"Look at the sign-board again," Foster said. I looked. The skull smiled, holding up a hand.

"I see it," I said. "But it doesn't explain why you handed over our last buck—"

"Look at the hand," Foster said. "Look at the ring on the finger."

I looked again. A heavy ring was painted on the bony index finger, with a pattern of concentric circles. It was a duplicate of the one on Foster's finger.

"Don't drink too much," Foster said. "You may need your wits about you tonight."

THE publican pulled the battered Morris Minor to the side of the highway and set the brake.

"This is as close as we best take the machine," he said. We got out, looked across the rolling plain where the megaliths of Stonehenge loomed against the last glow of sunset.

The publican rummaged in the boot, produced a ragged blanket and two long four-cell flashlights, gave one to Foster

and the other to me. "Do nae use the electric torches until I tell ye," he said, "lest the whole county see there's folks abroad here." We watched as he draped the blanket over a barbed-wire fence, clambered over, and started across the barren field. Foster and I followed, not talking.

The plain was deserted. A lonely light showed on a distant slope. It was a dark night with no moon. I could hardly see the ground ahead. A car moved along a distant road, its headlights bobbing.

We moved past the outer ring of stones, skirting fallen slabs twenty feet long.

"We'll break our necks," I said. "Let's have one of the flashlights."

"Not yet," Foster whispered.

Our guide paused; we came up to him.

"It were a mortal long time since I were last hereabouts," he said. "I best take me bearings off the Friar's Heel. . . ."

"What's that?"

"Yon great stone, standing alone in the Avenue." We squinted; it was barely visible as a dark shape against the sky.

"The bones were buried there?" Foster asked.

"Nay; all by theirself, they was. Now it were twenty paces, granfer said, him bein fifteen stone and long in the leg. . . ." The publican muttered.

"What's to keep him from just pointing to a spot after awhile," I said to Foster, "and saying 'This is it'?"

"We'll wait and see," Foster said.

"They were a hollow, as it were, in the earth," the publican said, "with a bit of stone by it. I reckon it were fifty paces from here—" he pointed, "—yonder."

"I don't see anything," I said.

"Let's take a closer look." Foster started off and I followed, the publican trailing behind. I made out a dim shape, with a deep depression in the earth before it.

"This could be the spot," Foster said. "Old graves often sink —"

SUDDENLY he grabbed my arm. "Look . . . !"

The surface of the ground before us seemed to tremble, then heave. Foster snapped on his flashlight. The earth at the bottom of the hollow rose, cracked open. A boiling mass of lumiself, rose, bumbling along the face of the weathered stone.

"Saints preserve us," the publican said in a choked voice. Foster and I stood, rooted to the spot, watching. The lone globe rose higher—and abruptly shot straight toward us. Foster threw up an arm and ducked. The ball of light veered, struck him a glancing blow and darted off a

few yards, hovered. In an instant, the air was alive with the spheres, boiling up from the ground, and hurtling toward us, buzzing like a hive of yellow-jackets. Foster's flashlight lanced out toward the swarm.

"Use your light, Legion!" he shouted hoarsely. I was still standing, frozen. The globes rushed straight at Foster, ignoring me. Behind me, I heard the publican turn and run. I fumbled with the flashlight switch, snapped it on, swung the beam of white light on Foster. The globe at his head vanished as the light touched it. More globes swarmed to Foster—and popped like soap bubbles in the flashlight's glare—but more swarmed to take their place. Foster reeled, fighting at them. He swung the light—and I heard it smash against the stone behind him. In the instant darkness, the globes clustered thick around his head.

"Foster," I yelled, "run!"

He got no more than five yards before he staggered, went to his knees. "Cover," he croaked. He fell on his face. I rushed the mass of darting globes, took up a stance straddling his body. A sulphurous reek hung around me. I coughed, concentrated on beaming the lights around Foster's head. No more were rising from the crack in the earth now. A suffocating cloud pressed

around both of us, but it was Foster they went for. I thought of the slab; if I could get my back to it, I might have a chance. I stooped, got a grip on Foster's coat, and started back, dragging him. The lights boiled around me. I swept the beam of light and kept going until my back slammed against the stone. I crouched against it. Now they could only come from the front.

I glanced at the cleft the lights had come from. It looked big enough to get Foster into. That would give him some protection. I tumbled him over the edge, then flattened my back against the slab and settled down to fight in earnest.

I worked in a pattern, sweeping vertically, then horizontally. The globes ignored me, drove toward the cleft, fighting to get at Foster, and I swept them away as they came. The cloud around me was smaller now, the attack less ravenous. I picked out individual globes, snuffed them out. The hum became ragged, faltered. Then there were only a few globes around me, milling wildly, disorganized. The last half dozen fled, bumbling away across the plain.

I slumped against the rock, sweat running down into my eyes, my lungs burning with the sulphur.

"Foster," I gasped. "Are you all right?"

He didn't answer. I flashed the light onto the cleft. It showed me damp clay, a few pebbles.

Foster was gone.

## CHAPTER VI

I SCRAMBLED to the edge of the pit, played the light around inside. It shelved back at one side, and a dark mouth showed, sloping down into the earth: the hiding place the globes had swarmed from.

Foster was wedged in the opening. I scrambled down beside him, tugged him back to level ground. He was still breathing; that was something.

I wondered if the pub owner would come back, now that the lights were gone—or if he'd tell someone what had happened, bring out a search party. Somehow, I doubted it. He didn't seem like the type to ask for trouble with the ghosts of ancient sinners.

Foster groaned, opened his eyes. "Where are . . . they?" he muttered.

"Take it easy, Foster," I said. "You're OK now."

"Legion," Foster said. He tried to sit up. "The Hunters . . ."

"I worked them over with the flashlights. They're gone."

"That means . . ."

"Let's not worry about what it means. Let's just get out of here."

"The Hunters—they burst out of the ground—from a cleft in the earth."

"That's right. You were halfway into the hole. I guess that's where they were hiding."

"The Pit of the Hunters," Foster said.

"If you say so," I said. "Lucky you didn't go down it."

"Legion, give me the flashlight."

"I feel something coming on that I'm not going to like," I said. I handed him the light and he flashed it into the tunnel mouth. I saw a polished roof of black glass arching four feet over the rubble-strewn bottom of the shaft. A stone, dislodged by my movement, clattered away down the 30° slope.

"That tunnel's man-made," I said. "And I don't mean neolithic man."

"Legion, we'll have to see what's down there," Foster said.

"We could come back later, with ropes and big insurance policies," I said.

"But we won't," said Foster. "We've found what we were looking for—"

"Sure," I said, "and it serves us right. Are you sure you feel good enough to make like Alice and the White Rabbit?"

"I'm sure. Let's go."

FOSTER thrust his legs into the opening, slid over the

edge. disappeared. I followed him. I eased down a few feet, glanced back for a last look at the night sky, then lost my grip and slid. I hit bottom hard enough to knock the wind out of me, and found myself lying on a level floor.

"What is this place?" I dug the flashlight out of the rubble, flashed it around. We were in a low-ceilinged room ten yards square. I saw smooth walls, the dark bulks of massive shapes that made me think of sarcophagi in Egyptian burial vaults—except that these threw back highlights from dials and levers.

"For a couple of guys who get shy in the company of cops," I said, "we've got a talent for doing the wrong thing. This is some kind of Top Secret military installation."

"Impossible," Foster replied. "This couldn't be a modern structure, at the bottom of a rubble-filled shaft—"

"Let's get out of here, fast," I said. "We've probably set off an alarm already."

As if in answer, a low chime cut across our talk. Pearly light sprang up on a square panel. I got to my feet, moved over to stare at it. Foster came to my side.

"What do you make of it?" he said.

"I'm no expert on stone-age

relics," I said. "But if that's not a radar screen, I'll eat it."

I sat down in the single chair before the dusty control console, and watched a red blip creep across the screen. Foster stood behind me.

"We owe a debt to that Ancient Sinner," he said. "Who would have dreamed he'd lead us here?"

"Ancient Sinner, Hell," I said. "This place is as modernistic as next year's juke box."

"Look at the symbols on the machines," Foster said. "They're identical with those in the first section of the Journal."

"All pot-hooks look alike to me," I said. "It's this screen that's got me worried. If I've got it doped out correctly, that blip is either a mighty slow airplane—or it's at one hell of an altitude."

"Modern aircraft operate at great heights," Foster said.

"Not at this height," I said. "Give me a few more minutes to study these scales. . . ."

"There are a number of controls here," Foster said. "Obviously intended to activate mechanisms—"

"Don't touch 'em," I said. "Unless you want to start World War III."

"I hardly think the results would be so drastic," Foster said. "Surely this installation has a simple purpose, uncon-



nected with modern wars—but very possibly connected with the mystery of the Journal—and of my own past.”

THE less we know about this, the better,” I said. “At least, if we don’t mess with anything, we can always claim we just stepped in here to get out of the rain—”

“You’re forgetting the Hunters,” Foster said.

“Some new anti-personnel gimmick,” I said.

“They came out of this shaft, Legion. It was opened by the pressure of the Hunters, burst- ing out.”

“Why did they pick that precise moment—just as we arrived?” I asked.

“I think they were aroused,” Foster said. “I think they sensed the presence of their ancient foe.”

I swung around to look at him.

“I see the way your thoughts are running,” I said. “You’re their Ancient Foe, now, huh? Just let me get this straight: that means that umpteen hundred years ago, you personally, had a fight with the Hunters—here at Stonehenge. You killed a batch of them and ran. You hired some kind of Viking ship and crossed the Atlantic. Later on, you lost your memory, and started being a guy named Foster.

A few weeks ago you lost it again. Is that the picture?”

“More or less.”

“And now we’re a couple of hundred feet under Stonehenge—after a brush with a crowd of luminous stinkbombs—and you’re telling me you’ll be nine hundred on your next birthday.”

“Remember the entry in the journal, Legion? ‘I came to the place of the Hunters, and it was a place I knew of old, and there was no hive, but a Pit built by men of the Two worlds . . .’”

“Okay,” I said. “So you’re pushing a thousand.

I glanced at the screen, got out a scrap of paper, and scribbled a rapid calculation. “Here’s another big number for you. That object on the screen is at an altitude—give or take a few percent—of thirty thousand miles.”

I TOSSED the pencil aside, swung around to frown at Foster. “What are we mixed up in, Foster? Not that I really want to know. I’m ready to go to a nice clean jail now, and pay my debt to society—”

“Calm down, Legion,” Foster said. “You’re raving.”

“OK,” I said, turning back to the screen. “You’re the boss. Do what you like. It’s just my reflexes wanting to run. I’ve got no place to run to. At least with you I’ve always got the wild

hope that maybe you're not completely nuts, and that somehow—"

I sat upright, eyes on the screen. "Look at this, Foster," I snapped. A pattern of dots flashed across the screen, faded, flashed again . . .

"Some kind of IFF," I said. "A recognition signal. I wonder what we're supposed to do now."

Foster watched the screen, saying nothing.

"I don't like that thing blinking at us," I said. "It makes me feel conspicuous." I looked at the big red button beside the screen. "Maybe if I pushed that . . ." Without waiting to think it over, I jabbed at it.

A yellow light blinked on the control panel. On the screen, the pattern of dots vanished. The red blip separated, a smaller blip moving off at right angles to the main mass.

"I'm not sure you should have done that," Foster said.

"There is room for doubt," I said in a strained voice. "It looks like I've launched a bomb from the ship overhead."

THE climb back up the tunnel took three hours, and every foot of the way I was listening to a refrain in my head: This may be it; this may be it; this may be it . . .

I crawled out of the tunnel

mouth and lay on my back, breathing hard. Foster groped his way out beside me.

"We'll have to get to the highway," I said, untying the ten-foot rope of ripped garments that had linked us during the climb. "There's a telephone at the pub; we'll notify the authorities . . ." I glanced up.

"Hold it," I said. I grabbed Foster's arm and pointed overhead. "What's that?"

Foster looked up. A brilliant point of blue light, brighter than a star, grew perceptibly as we watched.

"Maybe we won't get to notify anybody after all," I said. "I think that's our bomb—coming home to roost."

"That's illogical," Foster said. "The installation would hardly be arranged merely to destroy itself in so complex a manner."

"Let's get out of here," I yelled.

"It's approaching us very rapidly," Foster said. "The distance we could run in the next few minutes would be trivial by comparison with the killing radius of a modern bomb. We'll be safer sheltered in the cleft than in the open."

"We could slide back down the tunnel," I said.

"And be buried?"

"You're right; I'd rather fry on the surface."

We crouched, watching the

blue glare directly overhead, growing larger, brighter. I could see Foster's face by its light now.

"That's no bomb," Foster said. "It's not falling; it's coming down slowly . . . like a—"

"Like a slowly falling bomb," I said. "And it's coming right down on top of us. Goodbye, Foster. I can't claim it's been fun knowing you, but it's been different. We'll feel the heat any second now. I hope it's fast."

The glaring disc was the size of the full moon now, unbearably bright. It lit the plain like a pale blue sun. There was no sound. As it dropped lower, the disc fore-shortened and I could see a dark shape above it, dimly lit by the glare thrown back from the ground.

"The thing is the size of a ferry boat," I said.

"It's going to miss us," Foster said. "It will come to ground to the east of us."

We watched the slender shape float down with dreamlike slowness, now five hundred feet above, now three hundred, then hovering just above the giant stones.

"It's coming down smack on top of Stonehenge," I yelled.

WE watched as the vessel settled into place dead center on the ancient ring of stones. For a moment they were vividly

silhouetted against the flood of blue radiance; then abruptly, the glare faded and died.

"Foster," I said. "Do you think it's barely possible—"

A slit of yellow light appeared on the side of the hull, widened to a square. A ladder extended itself, dropping down to touch the ground.

"If somebody with tentacles starts down that ladder," I said, in an unnaturally shrill voice, "I'm getting out of here."

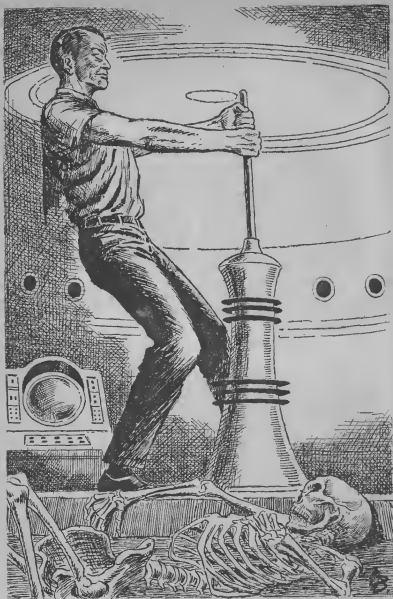
"No one will emerge," Foster said quietly. "I think we'll find, Legion, that this ship of space is at our disposal."

"I'M not going aboard that thing," I said. "I'm not sure of much in this world, but I'm sure of that."

"Legion," Foster said, "this is no twentieth century military vessel. It obviously homed on the transmitter in the underground station, which appears to be directly under the old monument—which is several thousand years old—"

"And I'm supposed to believe the ship has been orbiting the Earth for the last few thousand years, waiting for someone to push the red button? You call that logical?"

"Given permanent materials—such as those the notebook is made of—it's not impossible—or even difficult."



"We got out of the tunnel alive," I said. "Let's settle for that."

"We're on the verge of solving a mystery that goes back through the centuries," Foster said. "A mystery that I've pursued, if I understand the Journal, through many lifetimes—"

"One thing about losing your memory," I said. "You don't have any fixed ideas to get in the way of your theories."

Foster smiled grimly. "The trail has brought us here. I must follow it—wherever it leads."

I lay on the ground, staring up at the unbelievable shape, and the beckoning square of light. "This ship—or whatever it is," I said: "It drops down out of nowhere, and opens its doors—and you want to walk right into the cosy interior—"

"Listen!" Foster cut in.

I HEARD a low rumbling then, a sound that rolled ominously, like distant guns.

"More ships—" I started.

"Jet aircraft," Foster said. "From the bases in East Anglia probably. Of course, they'll have tracked our ship in—"

"That's all for me!" I yelled, getting to my feet. "The secret's out—"

"Get down, Legion," Foster shouted. The engines were a blanketing roar now.

"What for? They—"

Two long lines of fire traced themselves across the sky, curving down—

I hit the dirt behind the stone in the same instant the rockets struck. The shock wave slammed at the earth like a monster thunderclap, and I saw the tunnel mouth collapse. I twisted, saw the red interior of the jet tail-pipe as the fighter hurtled past, rolling into a climbing turn.

"They're crazy," I yelled. "Firing on—"

A second barrage blasted across my indignation. I hugged the muck and waited while nine salvoes shook the earth. Then the rumble died, reluctantly. The air reeked of high explosives.

"We'd have been dead now if we'd tried the tunnel," I gasped, spitting dirt. "It caved at the first rocket. And if the ship was what you thought, Foster, they've destroyed something—"

The sentence died unnoticed. The dust was settling and through it the shape of the ship reared up, unchanged except that the square of light was gone. As I watched, the door opened again and the ladder ran out once more, invitingly.

"They'll try next time with atomics," I said. "That may be too much for the ship's defenses—and it will sure as hell be too much for us—"

"Listen," Foster cut in. A deeper rumble was building in the distance.

"To the ship!" Foster called. He was up and running, and I hesitated just long enough to think about trying for the highway and being caught in the open—and then I was running, too. Ahead, Foster stumbled crossing the ground that had been ripped up by the rocket bursts, made it to the ladder, and went up it fast. The growl of the approaching bombers grew, a snarl of deadly hatred. I leaped a still-smoking stone fragment, took the ladder in two jumps, plunged into the yellow-lit interior. Behind me, the door smacked shut.

I WAS standing in a luxuriously fitted circular room. There was a pedestal in the center of the floor, from which a polished bar projected. The bones of a man lay beside it. While I stared, Foster sprang forward, seized the bar, and pulled. It slid back easily. The lights flickered, and I had a moment of vertigo. Nothing else happened.

"Try it the other way," I yelled. "The bombs will fall any second—" I went for it, hand outstretched. Foster thrust in front of me. "Look!"

I stared at the glowing panel he was pointing to—a duplicate of the one in the underground

chamber. It showed a curved white line, with a red point ascending from it.

"We're clear," Foster said. "We've made a successful take-off."

"But we can't be moving—there's no acceleration. There must be sound-proofing—that's why we can't hear the noise of the bombers."

"No sound-proofing would help if we were at ground zero," Foster said. "This ship is the product of an advanced science. We've left the bombers far behind."

"Where are we going? Who's steering this thing?"

"It steers itself, I would judge," Foster said. "I don't know where we're going, but we're well on the way. There's no doubting that."

I looked at him in amazement. "You like this, don't you, Foster? You're having the time of your life."

"I can't deny that I'm delighted at this turn of events," Foster said. "Don't you see? This vessel is a launch, or lifeboat, under automatic control. And it's taking us to the mother ship."

"Okay, Foster," I said. "I'm with you." I looked at the skeleton on the floor behind him, and added; "But I sure hope we have better luck than the last passenger."

IT was two hours later, and Foster and I stood silent before a ten-foot screen that had glowed into life when I touched a silver button beside it. It showed us a vast emptiness of bottomless black, set thick with corruscating points of polychrome brilliance that hurt to look at. And against that backdrop: a ship, vast beyond imagining, blotting out half the titanic vista with its bulk—

But dead.

Even from the distance of miles, I could sense it. The great black torpedo shape, dull moonlight glinting along the unbelievable length of its sleek flank, drifted: a derelict. I wondered for how many centuries it had waited here—and for what?

"I feel," said Foster, "somehow—I'm coming home."

I tried to say something, croaked, cleared my throat.

"If this is your jitney," I said, "I hope they didn't leave the meter ticking on you. We're broke."

"We're closing rapidly," said Foster. "Another ten minutes, I'd guess . . ."

"How do we go about heaving to, alongside? You didn't come across a book of instructions, did you?"

"I think I can predict that the approach will be automatic."

"This is your big moment, isn't it?" I said. "I've got to hand it to you, pal; you've won out by pluck."

The ship appeared to move smoothly closer, looming over us, fine golden lines of decorative filigree work visible now against the black. A tiny square of pale light appeared, grew into a huge bay door that swallowed us.

The screen went dark, there was a gentle jar, then motionlessness. The port opened, silently.

"We've arrived," Foster said. "Shall we step out and have a look?"

"I wouldn't think of going back without one," I said. I followed him out and stopped dead, gaping. I had expected an empty hold, bare metal walls. Instead, I found a vaulted cavern, shadowed, mysterious, rich with a thousand colors. There was a hint of strange perfume in the air, and I heard low music that muttered among stalagmite-like buttresses. There were pools, playing fountains, waterfalls, dim vistas stretching away, lit by slanting rays of muted sunlight.

"What kind of place is it?" I asked. "It's like a fairyland, or a dream."

"It's not an earthly scheme of decoration," Foster said, "but I find it strangely pleasing."

HEY, look over there," I yelled suddenly, pointing. An empty-eyed skull stared past me from the shadows at the base of a column.

Foster went over to the skull, stood looking down at it.

"There was a disaster here," he said. "That much is plain."

"It's creepy," I said. "Let's go back; I forgot to get film for my Brownie."

"The long-dead pose no threat," said Foster. He was kneeling, looking at the white bones. He picked up something, stared at it. "Look, Legion."

I went over. Foster held up a ring.

"We're onto something hot, pal," I said. "It's the twin to yours."

"I wonder . . . who he was."

I shook my head. "If we knew that—and who killed him—or what—"

"Let's go on. The answers must be here somewhere." Foster moved off toward a corridor that reminded me of a sunny avenue lined with chestnut trees—though there were no trees, and no sun. I followed, gaping.

For hours we wandered, looking, touching, not saying much but saturated in wonder, like kids in a toy factory. We came across another skeleton, lying among towering engines. Finally we paused in a giant storeroom stacked high with supplies.

"Have you stopped to think, Foster," I said, fingering a length of rose-violet cloth as thin as woven spider webs. "This boat's a treasure-house of marketable items. Talk about the wealth of the Indies—"

"I seek only one thing here, my friend," Foster said; "my past."

"Sure," I said. "But just in case you don't find it, you might consider the business angle. We can set up a regular shuttle run, hauling stuff down—"

"You Earthmen," sighed Foster. "For you, every new experience is immediately assessed in terms of its merchandising possibilities. Well, I leave that to you."

"Okay okay," I said. "You go on ahead and scout around down that way, if you want—where the technical-looking stuff is. I want to browse around here for a while."

"As you wish."

"We'll meet at this end of the big hall we passed back there. Okay?"

Foster nodded and went on. I turned to a bin filled with what looked like unset emeralds the size of walnuts. I picked up a handful, juggled them lovingly.

"Anyone for marbles?" I murmured to myself.

HOURS later I came along a corridor that was like a



path through a garden that was a forest, crossed a ballroom like a meadow floored in fine-grained rust-red wood and shaded by giant ferns, and went under an arch into the hall where Foster sat at a long table cut from yellow marble. A light the color of sunrise gleamed through tall pseudo-windows.

I dumped an armful of books on the table. "Look at these," I said. "All made from the same stuff as the Journal. And the pictures. . . ."

I flipped open one of the books, a heavy folio-sized volume, to a double-page spread in color showing a group of bearded Arabs in dingy white djellabas staring toward the camera, a flock of thin goats in the background. It looked like the kind of picture the National Geographic runs, except that the quality of the color and detail was equal to the best color transparencies.

"I can't read the print," I said, "but I'm a whiz at looking at pictures. Most of the books show scenes like I hope I never see in the flesh, but I found a few that were made on Earth—God knows how long ago."

"Travel books, perhaps," Foster said.

"Travel books that you could sell to any university on Earth for their next year's budget. Take a look at this one."

Foster looked across at the panoramic shot of a procession of shaven-headed men in white sarongs, carrying a miniature golden boat on their shoulders, descending a long flight of white stone steps leading from a colonnade of heroic human figures with folded arms and painted faces. In the background, brick-red cliffs loomed up, baked in desert heat.

"That's the temple of Hat-Shepsut in its prime," I said. "Which makes this print close to four thousand years old. Here's another I recognize." I turned to a smaller, aerial view, showing a gigantic pyramid, its polished stone facing chipped in places and with a few panels missing from the lower levels, revealing the cruder structure of massive blocks beneath.

"That's one of the major pyramids, maybe Khufu's," I said. "It was already a couple thousand years old, and falling into disrepair. And look at this —" I opened another volume, showed Foster a vivid photograph of a great shaggy elephant with a pinkish trunk upraised between wide-curving yellow tusks.

"A mastodon," I said. "And there's a woolly rhino, and an ugly-looking critter that must be a sabre-tooth. This book is old . . ."

"A lifetime of rummaging

wouldn't exhaust the treasures aboard this ship," said Foster.

"How about bones? Did you find any more?"

Foster nodded. "There was a disaster of some sort. Perhaps disease. None of the bones was broken."

I CAN'T figure the one in the life-boat," I said. "Why was he wearing a necklace of bear's teeth?" I sat down across from Foster. "We've got plenty of mysteries to solve, all right, but there are some other items we'd better talk about. For instance: where's the kitchen? I'm getting hungry."

Foster handed me a black rod from among several that lay on the table. "I think this may be important," he said.

"What is it? a chop stick?"

"Touch it to your head, above the ear."

"What does it do—give you a massage?" I pressed it to my temple . . .

*I was in a grey-walled room, facing a towering surface of ribbed metal. I reached out, placed my hands over the proper perforations. The housings opened. For apparent malfunction in the quaternary field amplifiers, I knew, auto-inspection circuit override was necessary before activation —*

I blinked, looked around at the rod in my hand.

"I was in some kind of powerhouse," I said. "There was something wrong with—with . . ."

"The Quaternary field amplifiers," Foster said.

"I seemed to be right there," I said. "I understood exactly what it was all about."

"These are technical manuals," Foster said. "They'll tell us everything we need to know about the ship."

"I was thinking about what I was getting ready to do," I said, "the way you do when you're starting into a job; I was trouble-shooting the Quaternary whatzits—and I knew how. . ."

Foster got to his feet and moved toward the doorway. "We'll have to start at one end of the library and work our way through," he said. "It will take us awhile, but we'll get the facts we need. Then we can plan."

FOSTER picked a handful of briefing rods from the racks in the comfortably furnished library and started in. The first thing we needed was a clue as to where to look for food and beds, or for operating instructions for the ship itself. I hoped we might find the equivalent of a library card-catalog; then we could put our hands on what we wanted in a hurry.

I went to the far end of the first rack and spotted a short row of red rods that stood out

vividly among the black ones. I took one out, thought it over, decided it was unlikely that it was any more dangerous than the others, and put it against my temple . . .

*As the bells rang, I applied neuro-vascular tension, suppressed cortical areas upsilon-zeta and iota, and stood by for—*

I jerked the rod from my head, my ears still ringing with the shrill alarm. The effect of the rods was like reality itself, but intensified, all attention focussed single-mindedly on the experience at hand. I thought of the entertainment potentialities of the idea. You could kill a tiger, ride an airplane down in flames, face the heavyweight champion—I wondered about the stronger sensations, like pain and fear. Would they seem as real as the impulse to check the whatchamacallits or tighten up your cortical thingamajigs?

I tried another rod.

*At the sound of the apextone, I racked instruments, walked, not ran, to the nearest transfer-channel—*

Another:

*Having assumed duty as Alert Officer, I reported first to coordination Control via short-line, and confirmed rapport—*

These were routine SOP's covering simple situations aboard ship. I skipped a few, tried again:

*Needing a xivometer, I keyed instruction-complex One, followed with the code—*

THREE rods further along, I got this:

*The situation falling outside my area of primary conditioning, I reported in corpo to Technical Briefing, Level Nine, Section Four, Sub-section Twelve, Preliminary. I recalled that it was now necessary to supply my activity code . . . my activity code . . . my activity code . . . (A sensation of disorientation grew; confused images flickered like vague background-noise; then a clear voice cut in:)*

**YOU HAVE SUFFERED PARTIAL PERSONALITY-FADE. DO NOT BE ALARMED. SELECT A GENERAL BACKGROUND ORIENTATION ROD FROM THE NEAREST EMERGENCY RACK. ITS LOCATION IS . . .**

*I was moving along the stacks, to pause in front of a niche where a U-shaped plastic strip was clamped to the wall. I removed it, fitted it to my head—*

*(Then:) I was moving along the stacks, to pause in front of a niche—*

I was leaning against the wall, my head humming. The red stick lay on the floor at my feet. That last bit had been potent: something about a general background briefing—

"Hey, Foster!" I called, "I think I've got something . . ."

"As I see it," I said, "this background briefing should tell us all we need to know about the ship; then we can plan our next move more intelligently. We'll know what we're doing." I took the thing from the wall, just as I had seemed to do in the phantom scene the red rod had projected for me.

"These things make me dizzy," I said, handing it to Foster. "Anyway, you're the logical one to try it."

He took the plastic shape, went to the reclining seat at the near end of the library hall, and settled himself. "I have an idea this one will hit harder than the others," he said.

He fitted the clamp to his head and . . . instantly his eyes glazed; he slumped back, limp.

"Foster!" I yelled. I jumped forward, started to pull the plastic piece from his head, then hesitated. Maybe Foster's abrupt reaction was standard procedure. In any case whatever harm this gadget could do to Foster's brain had already been done. I might as well let the process take its course. But I didn't like it much.

I went on reasoning with myself. After all, this was what the red rod had indicated as normal procedure in a given emergency. Foster was merely having his

faded personality touched up. And his full-blown, three-dimensional personality was what we needed to give us the answers to a lot of the questions we'd been asking. Though the ship and everything in it had lain unused and silent for forgotten millenia, still the library should be good. The librarian was gone from his post these thirty centuries, and Foster was lying unconscious, and I was thirty thousand miles from home—but I shouldn't let trifles like that worry me . . .

I GOT up and prowled the room. There wasn't much to look at except stacks and more stacks. The knowledge stored here was fantastic, both in magnitude and character. If I ever got home with a load of these rods . . .

I strolled through a door leading to another room. It was small, functional, dimly lit. The middle of the room was occupied by a large and elaborate divan with a cap-shaped fitting at one end. Other curious accoutrements were ranked along the walls. There wasn't much in them to thrill me. But bone-wise I had hit the jackpot.

Two skeletons lay near the door, in the final slump of death. Another lay beside the fancy couch. There was a long-bladed dagger beside it.

I squatted beside the two near

the door and examined them closely. As far as I could tell, they were as human as I was. I wondered what kind of men they had been, what kind of world they had come from, that could build a ship like this and stock it as it was stocked.

The dagger that lay near the other bones was interesting: it seemed to be made of a transparent orange metal, and its hilt was stamped in a repeated pattern of the Two Worlds motif. It was the first clue as to what had taken place among these men when they last lived: not a complete clue, but a start.

I took a closer look at an apparatus like a dentist's chair parked against the wall. There

were spidery-looking metal arms mounted above it, and a series of colored glass lenses. A row of dull silver cylinders was racked against the wall. Another projected from a socket at the side of the machine. I took it out and looked at it. It was of plain pewter-colored plastic, heavy and smooth. I felt pretty sure it was a close cousin to the chop sticks stored in the library. I wondered what brand of information was recorded in it as I dropped it in my pocket.

I lit a cigarette and went back out to where Foster lay. He was still in the same position as when I had left him. I sat down on the floor beside the couch to wait.

*(Continued next month)*

## EDGAR RICE BURROUGHS

**BACK IN  
PRINT!**

The following scarce E. R. Burroughs' titles are now available from us. All brand new printings, each volume cloth bound, with each volume having jackets and six interior illustrations by the famous artist Mahlan Blaine:

- |                                      |      |   |      |
|--------------------------------------|------|---|------|
| 1. <b>Fighting Man of Mars</b> ..... | 2.75 | } 3. <b>The Moon Men</b> (formerly titled:<br>"The Moon Maid")..... | 2.75 |
| 2. <b>The Monster Men</b> .....      | 2.75 |   |      |

ALSO: Complete in one large volume: Three "Mars" novels, complete and unabridged, with 16 illustrations by J. Allan St. John. Volume contains: "Thuvia: Maid of Mars" — "The Chessman of Mars" — "Mastermind of Mars." Heavy Paper Covers, with finest quality paper. Regular Book size. Price \$1.75 per copy

The following Burroughs' titles (cloth bound) will be available for August delivery:

- |                                       |      |                              |                                     |
|---------------------------------------|------|------------------------------|-------------------------------------|
| 4. <b>Tanar of Pellucidar</b> .....   | 2.75 | } 6. <b>Pellucidar</b> ..... | 2.75                                |
| 5. <b>Land That Time Forgot</b> ..... | 2.75 |                              | 7. <b>At the Earth's Core</b> ..... |

*Send all orders to:*

**STEPHEN'S BOOK SERVICE**

71 THIRD AVENUE NEW YORK 3, N.Y.

# the Blonde from Barsoom

By ROBERT F. YOUNG

Illustrated by SUMMERS

*The Tarks were attacking, the bosomy princess  
was clinging to him in terror, and Harold Smith  
realized he was at the end of his plot-line.*

*What a dilemma! And what an opportunity! !*

FOR the most part, all Harold Worthington Smith's Martian stories ever netted him were standard rejection slips, but every now and then one or another of the editors to whom he submitted them would pen him a brief note to the effect that his writing indicated an unusually vivid imagination. However, they invariably added, his dialogue was stilted, his heroines were dimensionally impossible, and his stories were wish-fulfillment reveries in a Burroughs vein—unredeemed, unfortunately, by Burroughs' high-flown puritanical idealism.

Harold agreed with them wholeheartedly on point no. 1. Thanks to his ability to achieve total identification with his pro-

tagonists, he did have an unusually vivid imagination. Take this very minute, for instance: His main character—Thon Carther the Earthman—was standing on the ocher moss of the Martian dead-sea bottom beside the big-breasted blond princess whom he had rescued from Tarkia some two thousand words ago, fearlessly awaiting the oncoming horde of Tarks. But it wasn't really Thon Carther who was standing there, it was Harold Worthington Smith—a tall, tanned and handsome Harold Worthington Smith, to be sure, but Harold Worthington Smith just the same.

On points no. 2 and 3, however—be it said forthwith—he did not agree. He had, moreover,



written to the editors in question and said so. A Burroughs influence, he had said, was an essential ingredient in the makeup of any science-fiction writer, and he was reasonably certain that he didn't exhibit one any more than half a dozen other scribes he could name. And as for his heroines being dimensionally impossible, such an attitude merely betrayed an inherent geocentrism: simply because 46-21-46 females didn't exist on Earth was no reason to take it for granted that they didn't exist on Mars. (He discreetly avoided any reference to point no. 4: there were times when he wondered about his dialogue himself.)

[T was a warm afternoon in August. His wife had gone to visit her sister, giving him temporary respite from her nagging, and there was no sound in the apartment except the steady hum of the electric fan and the sporadic clacking of the ancient typewriter. Altogether it was one of those rare moments when it was possible for his imagination to take over completely. It was, in fact, though he was not yet aware of it, the climactic moment in his career as a creative writer.

The Tark horde was rapidly closing in, and Thon Carther/Harold Worthington Smith decided it was high time he drew

his sword. *Clackety-clack-clack*. The blond princess, who hailed from the triple cities of Hydrogen and whose name was Thejah Doris, moved closer to him, and her golden shoulder brushed his sinewy arm. A tingling phalanx of thrills charged up and down his backbone. *Clack-clackety-clack. Clack!*

"Fear not, my princess," he said. "This noble sword has tasted the blood of many a Tark and is keen for the taste of the blood of many more!"

"My chieftain," she breathed, moving even closer.

He hefted the big sword, and the rays of the declining sun danced brightly on its burnished surface. For all its size, it was as light as a yardstick in his big brown masculine hand. The foremost Tark rider was very close now. Startlingly close. Thon-Smith realized with a start—and startlingly realistic. The malevolent green features stood out with dismaying clarity, and the tusks of the elongated eyeteeth gleamed with terrifying vividness.

Wildly Thon-Smith felt for his typewriter. Next he felt for his desk. Finally he looked around him for the familiar walls of the apartment. They, too, had disappeared. A shudder shot through his tall, tanned body. Something awful had happened.

Something even more awful



was going to happen if he didn't do something and do it soon, for the Tarks, looming building-tall astride their six-legged mounts, were almost upon them. He remembered the plot just in time, and seizing Thejah Doris around her slender waist, he gave a mighty leap that carried them—thanks to the tenuous Martian gravity—over the entire green horde to a resilient section of the dead-sea bottom a hundred feet behind the rearmost rider. It was, he reflected, somewhat of a *deus ex machina* stratagem now that he came to think of it; but now was no time to be hypercritical.

THE Tark horde had become a milling mass of chlorophyllic bodies, white tusks and squealing mounts. The warriors in the front ranks had tele-reined their toats before those in the middle ranks had wised up to what had happened, and those in the rear ranks still hadn't wised up. Chaos reigned. Thon-Smith was not slow to take advantage of the situation which he had so fortuitously provided. He was still upset over his missing typewriter, his missing desk, and his missing apartment, not to mention his missing civilization, but there would be time for reconnaissance later. Right now there was the little matter of Escape to be taken care of.

Briefly he referred to his mental synopsis of the plot. Oh, yes, there was an atmosphere boat hidden in the mound of desiccated algae before which his leap had conveniently terminated. (Another *deus ex machina* stratagem, he thought with annoyance; but again he reminded himself that now was no time to be quibbling over the literary aspects of the situation.)

"Come, my princess," he said, taking Thejah Doris' arm.

"Lead on, my chieftain!"

The atmosphere boat was there, just as he had visualized it. After uncovering it, they boarded its narrow deck, and soon they were rising into the darkening sky, once again thwarting the Tarks, who had reorganized their ranks and were charging with redoubled ferocity toward the mound.

Thejah Doris lay down beside him on the comfortable pilot's couch. "At last we are alone!" she breathed in her Martian-Hungarian accent.

Reconnaissance could wait, Thon-Smith decided quickly. There were worse fates after all than writing oneself so completely into one's stories that one could not extricate oneself. "My princess," he said, directing the prow of the atmosphere boat toward the littoral of an ancient continent and slipping his arm beneath her bare shoulders.

Immediately there came a frenzied scratching from the small forward cabin, and before he could even gain his feet a great eight-legged creature with multi-fanged, slavering jaws leaped upon him and began caressing his face with its long tongue. His faithful Droola! He winced. He'd forgotten all about his faithful watchdog. But a plot was a plot, and like any other scheme of things you had to go along with it. "Droola," he said. "Good old faithful Droola!"

**P**RESENTLY the nearer moon appeared and began its hurtling journey across the night sky. Stars winked into cold clean brightness. The atmosphere boat reached the mainland, floated over shadow-filled ravines and moon-kissed hilltops. The argent ribbon of a canal showed in the distance.

Thon-Smith's heartbeat quickened as he thought of the next sequence. He could hardly wait till the canal was beneath them, till the time came to guide the boat down to the argent sward that bordered the farther bank. He stepped lightly down to the soft turf and lifted Thejah Doris down beside him. He answered her questioning eyes: "A swim will refresh us, my princess. It will sharpen our senses and redouble our chances of eluding our persistent pursuers."

"But I cannot swim, my chieftain."

The externals did not call for a leer at this point; nevertheless, he had a hard time averting one. "Fear not, my princess," he said. "I, Thon Carther, will instruct you."

They walked together to the bank and stood there hand in hand. Behind them, Droola leaped from the deck and went romping up and down the esplanade. The nearer moon was high in the sky now, and the farther moon was just beginning to show above the hills. "First," Thon-Smith said, "we must remove our accouterments. They will weigh us down in the water and make movement well nigh impossible."

"All of them, my chieftain?"

"Yes, my princess, all of them."

She raised her hand to the gossamer thread that held her Martian equivalent of a halter in place. Abruptly the muffled thunder of padded toat hooves sounded in the distance.

Her hand dropped like a stone. "The Tarks!" she cried. "Oh, my chieftain, the mortal enemies of my people are close upon our heels!"

He choked back his disappointment. How could he have forgotten? He, the author, the creator! "Quickly," he said, seizing her arm. "Into the atmos-

phere boat. The canal will not stop them!"

BY the time they gained the deck the foremost rank of the Tark horde had reached the opposite bank. The green warriors did not pause for so much as a second, but goaded their mounts into the water. Once in the canal, Tark and toat became as one, and the horde took on the aspect of a school of gigantic green porpoises, leaping in and out of the water with incredible swiftness, reaching the other bank in a matter of minutes. But by then Thon-Smith and Thejah Doris were rising once again into the night sky. The romping Droola discovered their departure just in time, and with a mighty leap managed to gain the after deck and scramble to safety.

As soon as the craft gained sufficient altitude Thon-Smith threw it into fastflight and aligned the prow with the canal bank. The cool night air became a cold wind and the countryside blurred beneath them. He maintained the speed till he was sure their pursuers could no longer overtake them, then he cut down to slowflight and returned his attention to Thejah Doris.

She was lying on her side, gazing at him admiringly. Again he slipped his arm beneath her shoulders, but he had no sooner

done so when Droola, still shivering from the wind of fast-flight, bounded forward and snuggled between them.

The interruption was essential to the story's word count, but just the same it was frustrating. Even Thejah Doris looked put out, though she didn't say anything. Instead, she turned and reclined upon her back, hands clasped behind her head, and let the two moons vie with one another to do justice to her charms. It was an interesting contest to watch, and soon Thon-Smith became engrossed. He became so engrossed, in fact, that he failed to see the tower till it was too late.

It was a tall tower—remarkably tall when you considered the altitude of the atmosphere boat. He yanked the tiller savagely, but their momentum was too great, and a moment later the bow crumpled against stone. The deck tilted abruptly, and he barely managed to grab Thejah Doris before she tumbled over the low rail, and it was all he could do to maintain his balance till the rapidly sinking craft came opposite the dark aperture of a window. He leaped lightly to the sill, his Martian princess in his arms, and stepped into the musty gloom of a lofty chamber.

THE faithful Droola was not so fortunate. It essayed the

leap, but missed the sill by a good two feet. (He'd been planning on getting rid of Droola for a long time.) Dutifully he listened for the sound of the faithful body striking the ground, but when, an appropriate time later, the sound came, he could not summon the emotional response which the plot called for. All he could manage was a sort of vague contrition which was immediately negated by the realization that at last he and Thejah Doris were really alone.

She had discovered tapers on the dusty shelves that lined one wall of the chamber, and now she lit three of them and set them upon the rough wooden table that stood in the middle of the stone floor. "There is nothing to fear, my chieftain," she said. "This is one of the deserted lock-towers once maintained by the ancient Mii when Mars was young and great barges plied her blue canals. Above us is the control room itself, from which the mighty locks, now rusted and fallen to ruin, were manipulated by the ancient Miian tenders. Now the towers stand silent and forlorn, the havens of occasional wandering bards who find the lofty rooms and empty echoing stairways conducive to their search for the ever-elusive Muse."

He stared at her. It was, he had to admit, rather incongru-

ous phraseology to be issuing from the lips of a blonde who, for all her royal blood, still looked more like a burlesque queen than she did a princess. Well, no matter. "You look lovely by candlelight," he said.

"You are very gallant, my chieftain."

She lit another candle and went over and placed it in a wall niche beside an ancient sleeping couch. She turned and faced him. "At last we are alone."

He started toward her, arms outstretched. Simultaneously the thunder of padded toat hooves sounded in the distance.

"The Tarks!" Thejah Doris cried, eluding him and running to the window. "They've seen our light! Oh, my chieftain, the mortal enemies of my people threaten us once again!"

"Oh, for Pete's sake!" Thon-Smith said, throwing up his hands. "No wonder my stories get bounced!"

**R**ESIGNEDLY he went over and joined her at the window. Sure enough, the Tark horde was back in the running again. Warily he explored his mind for the next sequence. All he could find were the words, **END OF PART ONE.** That was when he remembered that he'd been trying his hand at a serial and had neglected to plot it beyond the first installment.

"Oh, my chieftain, what are we going to do?"

He did not answer. He was thinking—thinking furiously. If a writer could write himself so completely into a story that he became physically involved in it, was there any reason why he couldn't extricate himself by writing a factual account of his real life?

It was worth a try. The alternative was to plot *Installment Two*, and somehow he didn't feel quite up to it. *Installment One* had been rather an enervating experience.

Abruptly another thought struck him: *Why a factual account?*

He remembered his dingy little apartment, his dilapidated typewriter, his collection of rejection slips, his nagging, flat-chested wife—Suddenly he looked at Thejah Doris standing beside him with heaving breast, anxiously watching the relentless approach of the Tarks.

Why a factual account indeed!

He concentrated. When he had the plot firmly fixed in his mind he sat down at the table to write. A momentary crises arose. There was no paper, no pen, not even a pencil. Then he remembered what Thejah Doris had said about the wandering bards, and he began searching for a drawer. Even Martian poets needed something to write on. Presently

he found one and pulled it out. Sure enough, it contained several sheets of parchment-like paper, a long quill pen and a small vial of black fluid.

The thunder of padded toat hooves was growing louder by the minute. "Oh, my chieftain, what are we going to do!" Thejah Doris cried again.

"We're going to swap serials," Thon-Smith said, and began to write.

\* \* \*

IT was a fine bright morning. Harold Worthington Smith awoke late and lay for a while watching the robins flitting among the branches of the box elder outside his bedroom window. Then he got up and slipped leisurely into his lounging robe. Yawning, he stepped across the hall to his study. Below him in the kitchen his wife was humming happily, and he could smell coffee perking, wheatcakes frying and sausage sizzling.

He entered his study and walked over to the desk. He sat down. There were three long thin letters lying beside his solid gold typewriter where his wife had placed them. He opened them nonchalantly. The first one was from *The Edgar Rice Burroughs Reader* and contained a check for \$750.00, the second was from *Dead-Sea Bottom Stories* and contained a check for \$2500.00,

and the third was from *Red Planet Stories* and contained a check for \$5000.00.

The phone rang. He picked it up. "HWS speaking."

"Good morning, sir. This is Parker, of *Mammalian Blonde Stories*. Regarding that last piece you were kind enough to let us have a look at, would \$10,000.00 be—"

"Sorry," Harold Worthington Smith said, "I never discuss business matters before breakfast. Call me back later."

*Click.*

"Harold," his wife called from the foot of the stairs, "there's an editor outside."

"Another one?"

"Yes. Shall I let him in?"

"I suppose so. Tell him I'll try to give him a minute while I'm having my coffee."

He stacked the checks neatly and placed them on the large pile of checks to the right of the gold typewriter. He made a mental note to try to make the bank today. Checks were a nuisance when you let too many of them

accumulate. He threw the three long thin envelopes into the wastebasket marked "Long Thin Envelopes." It was full again, he noticed. He could have sworn he'd just emptied it a day or two ago.

His wife came running up the stairs. "Harold, two more editors just drove up! Shall I let them in, too?"

"You might as well," Harold Worthington Smith said. "If you don't, they'll just hang around the door all day and make a nuisance of themselves." He looked at her critically. She'd come through remarkably well. If anything she was even better stacked than she'd been before. "Tell them I'll be down presently, princess. And put some clothes on. For now," he added.

After she had gone he looked the study over carefully. When he was sure that no traces of his previous reality were present he descended slowly and majestically to the hall where the three editors humbly awaited him.

THE END

---

### ***Through Time and Space With Benedict Breadfruit: V***

ON the planet Tenta I, plants of the melon and related families were so rare that the king himself had issued a royal fiat to protect them. Not knowing this, Benedict Breadfruit's young son started to pick a pumpkin. Fortunately, his father stopped him in time.

"But *why* can't I pick a pumpkin, father?" asked the child.

"It would be a violation of the Gourd Edict, son."

—GRANDALL BARRETTON

# A Prison Make

By WILLIAM W. STUART

Illustrated by FINLAY

***Any similarity between the hero of this Kafka-esque tale and Everyman who chooses the security of the horrible known rather than face the unknown, is not by any means coincidental.***

THE man on the bunk woke, but not up. Not up at all. He didn't move, except for a sort of general half-twitch, half-shrug; didn't even open his eyes. Just past the black borderland of sleep in the miasmic, grey fog in which he found or failed to find himself, two things only seemed sure. One of these was that there was no hurry whatever about opening his eyes to his immediate surroundings. That could wait. He didn't know why but he knew it could wait.

He knew that. He knew also that he was a man. No doubt there. Not for an instant did he so much as suspect that he might be a small boy, a girl, woman, or some nameless beast. No; he was

a man. Not an old man, either. A man and still at least reasonably young.

These things he felt he knew but he could take no very great satisfaction in them. It didn't seem a very extensive knowledge; basic, but not extensive. What about other, collateral data—such as his name, status, situation, condition and present whereabouts?

He couldn't seem to think. No, no, he hadn't lost his memory. He felt confident that all those things were clearly recorded there someplace. Only they were obscured, out there in that mist, out where it was hard to grasp them just now. After a bit, it would all come back to him.

In the meantime he lay there.

He twitched again, a reflective thing, no volition entering into it. The surface under him gave a little; a bed of some sort, must be. It seemed rather too firm, a harder bed than he felt he was properly accustomed to. Not too bad though. He could—he had, apparently, rested well enough on it. Sheets? He couldn't feel any sheets, only something scratchy; a blanket. And it didn't, come to notice, feel as though he were wearing pajamas; more like ordinary clothes. And—he wiggled his toes—socks, yes. Shoes? No, at least he wasn't wearing shoes.

Now where would a man, not drunk, of course he wasn't drunk, be likely to go to bed in a hard bunk, blanket, no sheets, all or most of his clothes on except his shoes? Could be some sort of an Armed Forces outpost or . . . jail? The situation seemed to fit the pattern of a jail all too closely. And how would the fine young man he was sure he must be know all this about a jail pattern? Must have read it somewhere; seen it in a show. Well . . .

HE opened his eyes to a further greyness, only less thick than that inside. And there were bars in this greyness, there in front of him, heavy steel bars; on the sides, he turned his head,

walls of solid steel plate. To the rear? He lifted his head and turned it—a damp, dirty concrete wall. Oh it was a jail all right. He was in jail, in a cell. He didn't, at once, move any more. From where he lay on the cell's single bunk hung by chains from the right side wall, he could see a narrow, concrete corridor through the bars in front. A bare light bulb shone tiredly in a dirt-crusted metal reflector in the corridor's high ceiling; grey light oozed in through a high, barred window. It must be early morning, he figured.

Probably it was morning, at that. But, as he found in later time, you couldn't judge it from that window. It had only two tones, grey light or black; night or day. It was a window remote from any sun and the grey daytime quality was subject to no variations, or at least none that he could ever classify or use as a basis of measurement.

Well, assuming as he did then that it was morning in jail, what was he, whoever he was, doing in jail? The detail of his past was still solidly fogged in. But he wasn't a—a criminal. Anything like that he would surely know about, remember. It must be a mistake of some sort. Or could he be in jail for some justifiable, thoroughly respectable sin? Income tax, price fixing, collusion, something like that, actually



creditable rather than otherwise? No. He hadn't been through a trial, couldn't have been; and nobody ever went to jail for things like that except, perhaps, for a month or so and that after years of trials and appeals first.

Nevertheless, he was in jail. So? It must be an accident, a mistake of some sort. Of course. That would be it.

He sat up then, on the bunk. Shoes? He swung his stocking feet over the edge of the bunk and felt; bent down and looked. No shoes in sight. Well . . . he stood up. Ow! That concrete floor was cold. But he wouldn't have to stand for it—on it—for long. Whatever the mistake or misunderstanding had put him in jail, he would straighten it out quickly enough. He walked to the front of the cell to grasp bars, one in each hand, the conventional prisoners' pose.

"Hey!" he shouted, "hey!" He rattled the cell door, doing all the normal, conventional things. And, standing there shaking his cell door, he was a conventional, non-remarkable looking young man. Middling height, not short, not tall. Young, not more than thirty or so; not bad looking. Slim enough of waist so the lack of a belt didn't endanger the security of his pants. Naturally, they drooped and, naturally, he looked unshaven, dishevelled.

But his suit was of good quality. Shirt—no necktie, of course—too. He might very well have been a young executive, caught in a non-executive moment. Probably, he was, or had been. But in jail there are no executives. He was only a prisoner rattling a jail cell door.

TURNING his head and pressing against bars, he could look up and down the corridor outside. To his right, sighted through the left eye, it stretched, maybe a hundred feet, maybe more, to end in a right angle turn and a blank wall. The other way, some indeterminate, dim distance off, he could barely make out another barred door. There were, he could sense rather than see, other cells in neat, penal line on either side of his. Occupied? Yes. There were noises; grunts, yawns, mumbling, nothing distinguishable in the way of conversation but clear enough evidence that there were other prisoners. He was glad of that.

"Hey!" he yelled again, "hey, somebody. Come let me out of here, damnit." But nobody did.

After a bit he went back to his bunk and sat. Routine, he supposed, and rules. Probably it was too early yet. But certainly before long someone would come. They would have to let him see someone in authority; straight-

en this mess out fast enough then.

He stood and went through his pockets. Not much; but, at least, a crumpled pack with three cigarettes and one book of matches. He sat again and smoked. Patience.

Later, not long probably, he was roused from a dull torpor by a metallic clatter from the corridor. He leaped to his feet—damn that cold floor—and to the front of his cell. Outside, just one or two cells down from his own was a rig of some sort; some kind of a steam table on wheels, apparently. Anyway, it was steaming greasily. There were metal trays stacked at one end; buckets of one thing or another in apertures along its eight foot length. Breakfast? Something, anyway, being served up by four hopeless slatterns dressed in sack-like, brown and dirty white striped denim uniforms. The women whined and mumbled at each other as they dragged along, filling trays and tin cups from the containers in their steam table, passing them into cells, dispensers of the state's bounty, no benediction.

"Well now look at here, girls," said the lead witch, coming abreast of the man's cell, "looks like we got us a real juicy young buster, a nice gentleman prisoner type. Fresh meat, hah?"

They all screeched and

squawked then, crowding to the front of his cell to look, exchanging viciously obscene guesses regarding his probable past history of despicable crime, present intimate personal condition, and future possibilities, all singularly unattractive. He gaped at them a moment in shocked disgust and then backed from the door of his cell to sit on the bunk, head down, not looking, trying not to listen.

YEAH, that's the way it goes. He don't like our service; don't think what we got is sweet enough and pretty enough for his fine taste; not now, he don't. It's gonna surprise him some, ain't it, dears, how he'll learn to like our dishes and our room service after a little time, hah?" The first charmer hummed an unrecognizable non-musical bar or two and lifted straggling skirts high, higher to prance a misshapen dance step. The others cackled wildly.

"Show him Belle. Show him something to put in his dreams. He'll come around fast enough."

He squeezed his eyelids tighter shut.

"All right then, Sweetie, Jail-Birdie Boy," said Belle, dropping skirts. "Your appetite for our cell block service'll change. How d'you want your eggs, Bird-Boy?" She laughed.

He raised his head, dully. "Any



way you feel like laying them, goddamnit," he snarled.

The harsh amusement dissolved. "A funny one? Did I say fresh meat, dears? Too fresh, hah? All right. Should we serve him a chef's special?"

THE other two gruntingly pushed the steam table forward. One lifted a metal plate, something between a dish and a bowl, and scooped a ladle full of a greyish mess of whatever, mush of some sort. Edible? Conceivably. Then she reached into some nauseous recess of the table and brought out a stout roach, legs moving feebly. She dropped it into the mush. Number two drew a steaming cup of muddy liquid from an urn. Coffee? Well, it was a brown-grey, it had a smell, it wasn't soup. Coffee. The hag with the cup hawked gurglingly and spat into the cup. The third grinned evilly and dropped three slices of grey-white bread—grey was in everything—on the gritty corridor floor; stirred them around with her bunion cut left shoe; picked them up.

"Breakfast is served, Birdie. Juicy worms for the early jail bird." Belle opened the cell door. The man sat still on his bunk, staring fixedly at the floor. The stout slattern laughed, slopped the filthy bread on top of the expiring roach and Belle took the plate-bowl and the cup to slap

them down beside him. "Breakfast. Bread's your lunch. Maybe you'll be gladder to see us by supper. No? Then tomorrow, or the next day; or the next." She backed out and clanged the cell door shut. "No tipping," she said. The others cackled. "Please . . . no tipping."

They moved on down the row of cells. The man sat. Maybe he should have been more friendly; played up to them. Then he could have asked them . . . something . . . about seeing somebody, somebody in charge, a lawyer . . . anybody. He sat a while, ignoring the filthy bread, the noisome mush and the grey-tan coffee slush with the yellowish blob of spittle on top. But it bothered him. Not that he wanted to eat. God no. His stomach growled; let it growl. He was too nervous, too upset to eat anything, let alone . . . that. But his mouth, his throat were parched, cotton dry, a desert, a burned out waste of dehydrated tissue. Liquid . . . damn them. He went back again to the cell door. Shook it. Yelled, a hoarse croak. No answer, except a croaking echo, the subdued mutter from other cells. He quit trying to yell. His throat was too dry; it hurt.

FOR the first time since waking then, he really looked around, checked over the rest of the cell. It wasn't fancy. The bunk, hard

mattress, blanket. Bars, walls. And, at the rear of the cell, stark, yellow-white, unadorned and unlovely, was one toilet bowl, no wooden seat, just the stained enamel. To it and through from the dim concrete ceiling above ran a heavy iron water pipe. Just where the pipe met the bowl was the handle. He had seen it all before without taking real notice. A toilet. Hell no, he didn't need a toilet. He was all dried out, tensed, frozen inside. But . . . he walked the three short paces to the rear of the cell. He reached out, down; took the handle, pressed it. Water rushed out in a roaring flood, bubbling and swirling in stained bowl. Slowly the flow cut down and stopped. He pressed the handle again; again the rush of water. His tongue stuck to the roof of his mouth. Water.

Sure, there was water, plenty of water. Water, water . . . nor any drop . . . to drink? No, Good Lord no; it was unthinkable. A man couldn't, not conceivably, drink water that came from such a thing. He would choke on it, strangle, die. But water. . . . He would die. The iron pipe above the bowl was sweating, tiny droplets. He pressed his tongue, his face against it. Water.

Damned little water there. He hugged the pipe for a while, breath coming in harsh gasps. And, as he gasped, his mind

emptied, slowly to a blank, clear, unreflecting lucidity of, not thought, of direct motor response. A minute, two. Then, moving deliberately, not thinking deliberately, he turned back to his bunk. A dish. A cup of nauseating muck.

A little later he wiped his mouth with his sleeve and lit one of his two remaining cigarettes. The cup, rinsed, clean and filled with water, he had placed carefully down at the foot of the bunk on the inboard side. He sighed. His stomach rumbled. Food . . . no, not that. He wasn't really hungry. Even if, maybe, a piece or two of the bread might be cleaned off a bit . . . no.

He lay back on the bunk looking upward. Hm-m. There was something he hadn't noticed. Up there, maybe eight feet above the floor level, four under the ceiling, was a black box, about eight inches square by three deep. Standing on the bunk in his stocking feet, he could get to it easily enough. A wire ran from it into the ceiling. A speaker. At the bottom was a button. He pressed it. First, nothing but a faint hum. Then . . .

"Click. Good morning." It spoke with a coolly feminine-metallic voice, "welcome to the Kembel State Home of Protective Custody, Crime Prevention and Correction Number One-One-Seven."

"Jail." said the man, sitting back down on the bunk. "All it is, it's a crummy jail." It pleased him to tell the voice that, firmly and clearly.

"This," continued the speaker, "is a recording." The man shrugged. So what about it? "You have been admitted to protective custody here pending investigation, trial, review and ultimate disposition of your case. This is—click—Sunday morning. Sunday is a rest day. Cell block therapeutic work schedules are in effect Monday through Friday—click."

Work? What kind of work?

"You, as a custodial ward of the State, are entitled by law to representation of your own, freely selected legal counsel."

Ah! His lawyer would clear this mess up quickly enough.

"If you wish to name counsel you may do so now. Speak clearly, directly into your home-room sound box. Spell out name of counsel, home and business address, code, phone, and qualifications before the bar of this State. Click."

HIS lawyer? Did he have a lawyer? Who? Think, damn-it, think. The sound box was silent except for a faint hum, waiting. But he couldn't think. The name Lucille came into his mind, but it seemed unlikely that Lucille could be a lawyer."

"Click." The box spoke out again. "You have no expressed choice of counsel. You have therefore opted to avail yourself of the privilege of representation by State appointed counsel. You are now represented, with full power of attorney, by State Public Defenders, Contract 34-RC, Hollingsworth, Schintz and Associates, Attorneys at Law. Counsel will consult with client twice weekly. Sunday and Thursday between the hours of 1500 and 1600."

Well, at least he'd get to see some kind of a lawyer.

"And now," the voice seemed to take on the faintest note of enthusiastic interest, "you, as a custodial ward of the State will need a clear understanding of how we live here at Kembel State Home One-One-Seven. A clear understanding of the rules and policies applicable to custodial wards of the State will enable you to avoid difficulties and misunderstandings during your institutional life. Please listen carefully."

He didn't, however, listen very carefully.

"Code One," said the voice, relapsing into a sing-song drone, "Section A, 1, (a): Internal, closed circuit broadcast of instruction and entertainment. Broadcast is continuous, daily from 0500 through 2300. Music and entertainment material, 1800

through 2300. Custodial wards are urged to listen to instructional material provided by the State for their benefit. Failure to listen to a minimum of seventy-two hours of said material weekly shall result in penalty, four credits for each hour of short-fall. Code One, section A, 1, (b): Care of home-room facilities . . ."

The voice droned on. The hell with that noise. The man got up and pushed irritably at the button under the speaker. It faded out in a faint, protesting whine. A lawyer. The damned voice had said a lawyer would come on Sunday afternoon. And this was Sunday. This afternoon then. He should be out by dinner time. He . . . he was thirsty again. He got his cup from the foot of the bunk and drained the cool water with luxurious satisfaction. Plenty more where that . . . never mind that. He closed a door of his mind with determination. Then he used the toilet hurriedly and flushed it three times. The lawyer, his lawyer would come. He lay back down on the bunk. Nothing to do but wait.

SAY! Say there, boy. Up, up! Nothing to do but sleep? Eh? Up, up. My time is valuable." The voice was harsh, rasping, but with an unsubtle touch of educated superiority in it.

The man in the cell sat up at

the second "say," and was at the front of the cell clinging to the bars before the voice paused.

"What?" he asked, "What, what, what?"

What? It was still daylight. Still jail, too, no doubt about that. This must be the lawyer then. He blinked and stared through the bars; it was hard for a moment to focus in the grey light. The figure outside the cell looked something like . . . what? A wheel chair? A man in a wheel chair? A . . . now what in hell kind of a so-called lawyer was this? There was no man in the more or less wheel chair out there; only hardware, piled and assembled in a very roughly human shape. At the top were two lenses, eye-like except for being in a vertical line, mounted in a rounded, metallic container with a speaker and, presumably, sound receivers. Under that was a big, square, torso-sized, faintly humming black box. This rested on a—uh—conveyance, not unlike a wheel chair. Under the box was an electric motor and a reel of black wire. Attached to one side of the main box section was a single metal arm, a sort of skeletal framework of steel rods, jointed and with an arrangement of tiny wheels, pulleys and belts.

"Now what, for God's sake . . . ?"

"Whup! Excuse me a moment, my boy," rasped the speaker.

"Almost forgot my cord. Mustn't run down my battery here, and with two more clients after you." The motor under the black box whined. The wheels turned and the rig backed away from the cell. It rolled some ten paces back up the corridor; stopped; the metal arm reached, caught a plug at the end of the wire on the reel and plugged it into a socket in the far wall of the building. Then the thing rolled back to the cell, the wire unrolling from the reel to trail behind it.

"There!" said the speaker with a note of satisfaction. "Now, the case . . . let's see . . . oh yes. J7-OP-7243-R. Arrested on suspicion, vice and homicide squad random selection, brought in for subjective interrogation at 2200, night of the 14th last."

The prisoner's mouth opened and closed again. He had a few things to say to this mess of machinery. But this information concerned him. He would listen first.

"On the basis of clear data extracted, recorded and interpreted, charged with larceny; grand larceny; extortion; felonious assault; lewd and lascivious conduct; assault with intent to rape; rape; . . ."

"No, no." The man gripped the bars. "No!"

"... and murder in the first."

"No! I didn't. I didn't do any

of those things. I know I didn't."

"Ah?" inquired the speaker, "Splendid. It might make an interesting defense. How do you know you didn't?"

"I-uh-hell, I just know, that's all. Murder? Ridiculous. Rape? I mean actually using force, real force to . . . no. I never dreamed of such a thing, of any of them."

"Never dreamed of such things? Oh come now."

"Of course I never. . . ." Of course he had never done any of those things. Of course . . . well. Dreams, hell, a man could have all kinds of crazy dreams. That didn't mean anything. A man couldn't control dreams. They didn't mean anything.

"Fact is, boy, you must have done those things or dreamed them. Where do you suppose they got your charges?"

"What?"

"They put you through shock, electric and drug, and went through your mind. Amazing technical advances have been made recently. They extract virtually everything now. The process may have left your own circuits somewhat blurred—did you notice that?—but the accuracy of information obtained is complete; legal evidence, my boy. And these things with which you have been charged were all taken right from your own mind."

"But a dream doesn't mean



anything. I never did any of those things."

OF course the dividing line between fact and fantasy is indeterminate and the law does recognize a distinction, when it can be proven, although the trend is decidedly toward equating the intent with the act. Eliminates confusion, as you can see. Well, never mind boy. We shall make a fine case of this, legal history. You are in good hands."

"We . . . you . . . Now look here, damnit, you're nothing but a confounded robot."

"Computer, Pinnacle, Legal Model X 27, working title, Mr. Boswell. Boy, you are extremely fortunate. You couldn't get a finer legal mind anyplace. Programmed through the State Supreme Court library, shades of interpretation, judgment and emotional factors drawn from the minds of Mr. Hollingsworth and Judge Schintz, both very compassionate men. Circuits overhauled only last month."

"I want a real lawyer."

"I am your lawyer, boy, by law. Fortunate thing too, for you. I can see your case through. Mr. Hollingsworth—wonderful gentleman, of course—but even now he is, well, not as young as he used to be. Bad thing, to change lawyers in mid-case, eh? You are lucky, boy. You know the human mind is fallible."

"You almost forgot to plug in that silly extension cord."

"Service men are not what they should be. Some of those back motor circuits of mine, not properly rewired at all. But those are minor areas, non-legal. Why is your cell speaker cut off, boy?"

"That thing? It got on my nerves so I cut it off, that's why. So?"

"Turn it on at once. You can't afford to lose credits, boy."

"Credits?"

"Boy . . . m-mph. Your circuits are in bad shape, aren't they? You are going to want things, boy. Cigarettes—here's a pack for now, by the way. Books. Other-ah-little extras from the trustees from the women's division. With that mind of yours, from the charge sheets . . . you buy things here with your credits and you are going to need them."

"How do I get . . . ?"

"Do your work. Follow the rules. You earn credits. Turn on your speaker."

He turned it on. "You talk like I'd be here forever."

"Eh? Oh no. It will be less than that, eh? Eh, eh. Don't worry, boy. I'll be taking care of you. So. This is all the time my programming permits me to give you now. Till Thursday, eh? Good night, boy."

The wheel chair rig backed

tle, four more. All right, he had them. Tonight he was really going to make a night of it. Yeah.

Yeah?

Yeah. And the next day, Thursday, all day . . . yeah! His head ached, stomach churned; that burning back of the eyeballs; the awful, tight-drawn humming of nerves. And on just one bottle? God, that acid-burn gin. No, old Belle had been in rare form and he got two bottles instead of one. But even so . . . must be that stew the night before. Oh death!

He fought the day, his work, all day. He missed quota. The fingers were just a blistering mist before his eyes. He drank water and gagged on it. He paced his cell. He sweated. God! Could a man live like this?

"Boy! Say there, boy. Look alive, eh?"

Mr. Boswell, the old electronic shyster. It was afternoon, finally, of the everlasting, miserable day. Jay 7 looked up to watch sullenly as, the usual afterthought, Mr. Boswell rolled on off to plug in his cord; and rolled back. Made a noise, a harumph-type, throat clearing, introductory noise. Mr. Boswell had no throat but he was a believer in certain niceties, form and procedure.

"Well now, boy. Let me see, where are we? Oh yes. Bring you up to date. My latest petition

for further continuance pending a review of the transer . . ."

SUDDENLY, it was all too much. Jay 7 was mad, furious. He, in a word, blew his gin-throbbing top. He was on his feet, shaking hands, white-knuckled, gripping bars. "Goddamnit!" he shouted, "Goddamnit, you rotten old fraud, I've had enough, you hear me? I got a by-God-bellyfull enough."

"Oh?" inquired Mr. Boswell, mildly. "Enough is enough, eh? But how can we be sure that alternatives . . ."

"All right, all right." Jay 7 wouldn't get anything out of him by shouting, he knew that. He was still tense and shaking but he managed to lower his voice to a tense, confidential whisper of appeal. "But I can't take much more of this. And the uncertainty. I've got to know. How much longer, huh? Please, please, Mr. Boswell, man to man . . . when will the trial come? How much longer before we go to court, I—we—get my acquittal, huh? Man to man, when can I walk out of here a free man?"

"Man to man? You are just a boy, boy. Show it all the time. Man to man? Well . . . perhaps it is time you did grow up a bit. So. You want to know when you will leave here a free man? I'll tell you. Never."

"Never!?"

ing properly on the page. It wasn't so easy. He earned his credits; made his quota, too, every day. Mr. Boswell was pleased with him. So.

He looked around him at his home-room with a certain clear satisfaction, if not pride. Now he kept his own mess kit, clean and shining. He had the shelf with ketchup, mustard; soap and shaving gear; tobacco and cigarette papers; a nice white enamel basin. And something more, too. Set into his water pipe, above the toilet bowl was a real luxury item—a faucet. Not many custodials earned that privilege but he had had it now for . . . how long? Hard to say, to keep track. Quite a while now, anyway, but the pleasure in having it, in not having to use the bowl of the toilet for . . . everything, hadn't worn off. He put his mess kit on his shelf, took his cup and went to draw a cup of water, for the joy in being able to do it, mostly. He drank luxuriously; carelessly spilled a half-cup of water into the bowl.

There was a tapping on the wall, left side, across from his bunk. He frowned and ignored it. That tapping from other cells never amounted to anything, never seemed to make any sense. He'd tried it himself, at first. For some reason, a vibration barrier, it wasn't possible to talk and distinguish words from one

cell to the next. But tapping? It made no sense either. It was an annoyance and the hell with it. Except . . .

JAY 7 reached up over his head and brought down his mess gear; put it on his bunk in front of him; picked up his blunt knife and spoon. Overhead, the squawk box wound up a stirring speech on something by the governor and launched into the 1800 review of the rules. The sing-song voice started. Jay 7 began to rap a rhythm, simple at first, building into more intricate patterns, following the flow of the speaker. "Code One—tap, tap—Section A, 1 (a)—tap-tappety tap—" His head nodded. That was the only tapping that meant anything, a beat with a lift that a man could put himself into. His head nodded and he listened, absorbed, to his pattern of rhythm. He felt pretty good. Later he would feel better.

Sure. Sure he would. This was Wednesday, a Rec. night. Tonight, after supper, Belle and her Three Graces would make a night round. "Personal service"—if you had the credits. He had the credits. He'd take a fall—hell, a couple, why not—out of old Belle herself. Not that Belle looked any better than the others, but at least she put a little life into it. A couple of hours with Belle, twelve credits; a bot-

tle, four more. All right, he had them. Tonight he was really going to make a night of it. Yeah.

Yeah?

Yeah. And the next day, Thursday, all day . . . yeah! His head ached, stomach churned; that burning back of the eyeballs; the awful, tight-drawn humming of nerves. And on just one bottle? God, that acid-burn gin. No, old Belle had been in rare form and he got two bottles instead of one. But even so . . . must be that stew the night before. Oh death!

He fought the day, his work, all day. He missed quota. The fingers were just a blistering mist before his eyes. He drank water and gagged on it. He paced his cell. He sweated. God! Could a man live like this?

"Boy! Say there, boy. Look alive, eh?"

Mr. Boswell, the old electronic shyster. It was afternoon, finally, of the everlasting, miserable day. Jay 7 looked up to watch sullenly as, the usual afterthought, Mr. Boswell rolled on off to plug in his cord; and rolled back. Made a noise, a harumph-type, throat clearing, introductory noise. Mr. Boswell had no throat but he was a believer in certain niceties, form and procedure.

"Well now, boy. Let me see, where are we? Oh yes. Bring you up to date. My latest petition

for further continuance pending a review of the transer . . ."

SUDDENLY, it was all too much. Jay 7 was mad, furious. He, in a word, blew his gin-throbbing top. He was on his feet, shaking hands, white-knuckled, gripping bars. "Goddamnit!" he shouted, "Goddamnit, you rotten old fraud, I've had enough, you hear me? I got a by-God-bellyfull enough."

"Oh?" inquired Mr. Boswell, mildly. "Enough is enough, eh? But how can we be sure that alternatives . . ."

"All right, all right." Jay 7 wouldn't get anything out of him by shouting, he knew that. He was still tense and shaking but he managed to lower his voice to a tense, confidential whisper of appeal. "But I can't take much more of this. And the uncertainty. I've got to know. How much longer, huh? Please, please, Mr. Boswell, man to man . . . when will the trial come? How much longer before we go to court, I—we—get my acquittal, huh? Man to man, when can I walk out of here a free man?"

"Man to man? You are just a boy, boy. Show it all the time. Man to man? Well . . . perhaps it is time you did grow up a bit. So. You want to know when you will leave here a free man? I'll tell you. Never."

"Never!?"

NEVER. Hasn't that been obvious from the start? Look. You know the charges, the evidence against you. In your actions, in your mind, either way you are guilty, boy. Regardless of the degree, you are guilty. The evidence is undeniable. You know better than I how guilty you are."

"No!"

"You are so eager to leave here? Why?"

"Just to get out. To be free. Isn't that enough?"

"Nonsense, lad; nonsense. You are doing fine here, just fine. Look at it this way. You are here for the common good, yours and society's, in protective custody. You have made rather a nice adjustment. Quite nice, really. To accept it gracefully, gratefully, is best. And, with me as your counsel, there is no reason why we cannot hope to continue your case indefinitely—for years, for decades. Why . . ."

"No! No, they can't, you can't do that to me." A highly unoriginal protest. Mr. Boswell made a mild sound of disapproval. At such times he regretted the limitations of construction that did not permit him a shake of the head.

"Years? Decades? No! I can't stand it; I can't, I won't. I'll find a way out. I'll make a way."

"Suicide? Oh now, my boy, please. To take your own life? A

shameful thing. And not at all fair to my firm."

"No, not suicide. I—I'll break out. Damn you, I will. I'll grab your damned wire—I can reach it from here; I'll pull your plug. You'll have to take me out of here or I'll let your juice run out and you'll die. Boswell, you're going to hide me under that machinery of yours and take me out."

"Oh? But my boy—what then?"

"Then I'll be out, that's what."

"Then you will be out. Out of here; out in the street; out of protective custody; outside the law. You would be alone then, lad; alone with your guilt, cast out, apart from society and the sound, stable order you find here. And would not every decent man's hand be against you? Think, my boy, what that means: Could you face it?" During these remarks, as Jay 7 clung, hot-eyed and shaking to the bars, Mr. Boswell had backed prudently well away, out of reach from the cell door.

"Yes! I don't care. To hell with you; to hell with all of them. I've got to get out of here. Come back, you coward. I tell you I've got to get out, out, out!"

Mr. Boswell backed across the corridor and pulled his plug from the socket. The wire rolled back neatly on the spool. "Time—no more time; other clients." He

peered myopically through thick lenses back toward the cell. "Please, lad—it pains me to hear you talk so wildly."

"I've got to get out, you hear? Out!"

WELL, my boy, if it has become such a phobia with you and you feel you have got to do so foolish a thing . . . why don't you just walk out?"

"Walk out? What in hell are you talking about? How can I walk out of this cell?"

"Now, now, boy. You are only in protective custody, to protect you from yourself, from an outraged society, you understand. That cell isn't locked. Never has been. You know that."

"That's a lie!" The man, Jay 7, threw himself against the bars, pressed against them, every muscle straining. "It's locked, locked. You can see. It won't open."

"Now, now," said Mr. Boswell again, starting to swing around on his wheels, "that door opens inward. You get your food through it, your work; the other-ah-amenities, girls . . . eh? No-

body ever unlocks that door, isn't that right? They all just push it open. Right? Eh? It opens in."

"You lie. It's a damned, rotten, filthy lie." He was yelling, shaking, rattling the door; pushing at the door.

"Easy, boy," said Mr. Boswell, "easy now. If you say so . . . perhaps you are right after all. So. We adjust, eh? See you Sunday. There are some details, questions of improper punctuation in the transcript of your involuntary confession we must go over; something we can use in the next preliminary hearing. Eh? Good night, boy." Mr. Boswell rolled off, smoothly as always, down the corridor.

Jay 7 quit pushing then, all at once and completely, and hung limply, two hands circling two solid bars, leaning heavily against the cell door. He sobbed once and then sniffed. He felt thirsty. So . . . well, he had his cup, his own faucet. He could get a nice, cold drink of water any time he wanted it. He sniffed again and turned away from the barred door.

THE END

---

For as little as \$2.50 (25¢ per word; 10-word minimum) your classified message will be read by more than 50,000 active buyers each month. Test them today! You'll be delighted with the results! For complete details, write:

MARTIN LINCOLN, *Classified Advertising Manager*  
AMAZING

One Park Avenue, New York 16, New York

# The Last Class

(With Apologies to Emile Zola)

By RICHARD BANKS

Illustrated by ADKINS

*Many years ago Emile Zola wrote a tale, by this same title, of a French schoolmaster who was forced to leave his pupils by the victorious German troops after the Franco-Prussian War. The schoolmaster's last words were: Vive la France! Miss Hippieness, in this story, had no final words. But if she had, they might have been:*

***"Long live the 20th Century!"***

AND now, children," said Miss Hippieness, her smile shooting deep wrinkles across her face like the cracks up the scarred sides of the ancient, empty skyscrapers of New York.

The twelve children in the cozy classroom came to attention. It was not her words, it was the tone, the creaking smile.

"And now, children," said Miss Hippieness again, sitting down on the old-fashioned

straight chair she affected, "have you all put away your atomic blocks?"

"Yes, teacher," came the chorus of sweet young voices.

"Your electronic jackstraws? Your pencil-mnestic?"

"Yes, teacher."

"And have you all put the pretty little activator pills in your mouths?"

They nodded. Miss Hippieness raised her hand for silence.

"Thirty dear, dear seconds, children," she said.

A sigh of pleasure suddenly smoked up from the twelve young faces as the pills took effect, and they remembered. Poor little darlings, to be so terribly fooled, said Miss Hippieness to herself.

If it was only possible for them to remember THIS part of the day, outside—and not to have it blacked out by the pills half an hour from now. To remember this part of the day, above all other parts, on into adulthood. What a different world they would create. . . .

"So we come to the nice nice part of our day," she said. "We are going to talk again about the 20th Century."

The children fidgeted in pleasure. She had turned on the sun five minutes ago and its beams through the window highlighted the youngness, the eagerness of their faces, turned so trustingly to her.

Here and there the sunlight flashed silver glints for instants on the tiny identification discs, smaller than 20th Century dimes in their foreheads and half hidden in the hairlines where they were inset in each person nowadays at birth.

A small hand shot up.

"Yes?" said Miss Hippieness.

"Can we talk about the gangsters?" Marymarymary asked.

Another small hand jerked up, eagerly.

"Yes?" said Miss Hippieness.

"Can we talk about wars and bombs and things?" Henry Sixhenry asked.

Miss Hippieness beamed on them. "Children, children," she scolded in fake sternness, "of course we can. But we've talked about them all so often. Isn't there something else you'd rather hear?"

The little hands sprouted like fast weeds.

"Miss Hippieness—" "Miss Hippieness—"

She was called *Miss Hippieness*, even to her face now, and she didn't dislike it. Somewhere inside her the name had begun to give out a pulsing warmth like a tiny real sun. Fifty years ago she would have disintegrated any child who would have dared to call her such a name.

Her eyes flicked at the disintegrator, still standing in its corner opposite the matter transmitter. But it was a dusty, dirty old thing. She hadn't used it in years. At home, she still had the hair ribbon—they had been in style briefly that year among certain types of families—the last little girl had been wearing the day she had walked so defiantly into the disintegrator.

MORE frequently, the last year or so, Miss Hippieness





had been troubled by nightmares in which the little girl's face peppered everything. Strange. She didn't remember the faces of those other children she had forced to march into the machine. But then, she had been much younger in those days, so much more a part of this contemporary world. And of course, that was before she had begun delving so avidly into history.

Miss Hippiness had been teaching the first grade in the same school—Official Learning Dome 111, called OLD Triple-One—for almost sixty years and she had been a great teacher. She had never been a really large woman or a fat one. It was just that she tended to massiveness in the one part of her anatomy, and ten years ago she had let

the massiveness really bloom.

Never again had she given in to the pressures of fashion in a world where hips and breasts came and went on women like hemlines of the 20th Century.

The 20th Century!

Miss Hippiness let a dreaminess invade her eyes.

"Children," she said in her fond voice, "the 20th Century has never been duplicated. It stands unique in history. Think of the richness of that far age when a person could actually choose what he was going to do in life, and where there were still hunger and sickness and want and—"

"And wars," said little Charley Tencharles.

"Yes," said Miss Hippiness. "And accidents hurting people faster than seconds in a clock.

And people fighting each other and cursing each other with words we don't even know any more."

"Like someday-vitch," cried Marymarymary.

Miss Hippiness rolled her eyes in joy. "It was son of a bitch, dear," she said. "It was a string of tiny real words that slished off the tongue like a string of bright little silver daggers."

"Yes, teacher," the children chorused, squirming in wonder.

"And there were the gangsters, those wonderful, wonderful eccentric persons, like the robinhoods and beowulfs I've told you about. And yes, there were the bombs that went bam and boom and wham, and made beautiful colors and high gorgeous mushrooming clouds—like the pictures in the ancient book I smuggled in to show you the other day."

"And people blown to bits," said Stan Thirtystanley in a fake grownup voice.

"To little itsy-bitsy bits," Miss Hippiness cried. "The 20th Century, children. Ah, what happiness to have lived then, the whole world violent and dangerous and seething and exciting like a string of storybooks every inch of the way around the equator. But where you could be an individual—your own boss, they used to call it."

She couldn't sit now. She

raised her massive hips off the straight chair and began pacing up and down the room, her face like an ancient television screen. And the children's eyes followed her like hungry puppies after a mama dog.

IT was the final splurge, children, of the individual man," she said. "Nowadays we have a world of people, all the same, all dull, all safe and healthy and secure. Then it was a world of persons. And in between every bit of violence there was a cozy bit of restful safety. In between every bit of anger there was a silent bit of cozy peace. For every tragic moment there was a moment of sunny happiness."

"And were people really, really allowed to die by themselves?" asked Charley Tencharles.

She stopped and bent a loving glance on him. In the 20th Century he would have been called Teacher's Pet. He was a dear and a doll and an angel.

"Oh, many, many good people," she said, a catch in her voice, "died by themselves. Imagine, some were taken by old age! And, as we said last week, there were those wonderful sicknesses. A person could die of one of those. Nobody in the whole 20th Century had a card in the central bureau which had on it the date of their death. Think of it, children."

SHE was wound up now, coming to the new part she had to tell them. The part about electronics, which had been an infant science at the start of the 20th Century. Matter transmitters were not known, nor disintegrators. Robots were just on the horizon. Radio and television came to flower. Man was just beginning to step off the face of the world into deep space. And there were so few people on earth that there were open fields all over every continent. Fine blowing trees everywhere, and real, live wild flowers.

"Man started the 20th Century in complete privacy," she said, her vast hips quivering as she paced. "Then came the time—this was during the years of the gangsters—when electronics helped man put tiny ears in rooms, behind pictures on the walls, so private speech could be recorded. And telephones—did I tell you what telephones were?—could be tapped, as they called it, so other people could listen in when you had secrets to tell a friend."

And then, she told them, late in the 20th Century came the best part of the story—the discovery that man could "wiretap" other men so secretly that nobody knew.

"Think of it," she cried. "You could be telling your secrets to Papa. And then, later, Papa

would be called in to a police station and his wiretap taken out and everything you said was recorded on a tiny spool inside him."

"Ah," said the children, relishing the shudder of it all. It was like a prehistoric ghost story, possible but weird because it had no connection to known life.

"But the human wiretaps didn't last long," said Miss Hippiness, making a serious-comic face which brought a ripple of laughter to the twelve youngsters. "By early in the 21st Century every part of the world had passed laws so nobody ever again could be wiretapped."

She looked at the clock. In two minutes the pills would wear off.

"Enough for today, children," she announced.

"But how about the gangsters?" Marymarymary asked in a petulant voice. "Please, Miss Hippiness, you said—"

"Enough for today," Miss Hippiness said sternly. "It's time to go home. We'll tell more stories tomorrow."

She said it just in time. The sun blinked out. A bell tinkled, and the school day was over. The children stood up and waited.

"All right," said Miss Hippiness with a smile. "Single file, children. To the transmitter in your right order."

The children walked, like children always have, with spurting

giggles and sudden scuffles, toward the gleaming wire cage, festooned with pretty cutouts of colorful animals and buildings and trees.

Marymarymary was always the first, this year. She stood in front of the transmitter opening, let the electronic beam play on her forehead identification disc, then stepped in.

Swup. She was gone, delivered to her home, delivered to her mama and papa—and she wouldn't remember a thing of the "story hour," Miss Hippiness thought happily. But maybe when she grew up, maybe when they all grew up, things would erupt here and there from their subconscious and—

They each stood their moment for the beam to catch their discs, stepped in and were swupped off. At last only Charley Tencharles was left and he scurried around, like teacher's pets immemorial, helping Miss Hippiness do the last things a classroom needs to put it to rest for the night.

Miss Hippiness gave his shoulders a last motherly squeeze and pushed him in front of the matter transmitter.

"Tomorrow?" she said. His young grin was like wine in her blood. He stepped in and was swupped instantly.

Miss Hippiness sighed and went back to sit on her straight chair. It wasn't comfortable and

it wasn't pretty. But it somehow fit whatever had been happening inside her the last year or two.

She glanced at the faint shimmer inside the transmitter where Charley had been swupped. He was such a darling. Quiet, shy, adorable. If they had allowed her to have a son, instead of decreeing that she be a childless teacher, she said. But she couldn't finish the thought.

It was when the children went that she felt the growing anger and unrest and sickness inside her. It was terrible when the children left. She wondered how long it had been now since she had seen the real surface of the earth. She swupped back and forth, morning and night, from her sleeping room to her classroom. They were a thousand miles apart, actually, but an instant apart through the transmitter.

And she had been swupping to that old library in the south of what had been France to browse in the forgotten ancient books there. But she never went outdoors. She never saw the sky anymore.

"Why, it must be spring," she said aloud, "and I've not seen a creek or a river in—how long?"

If she had been allowed to have a son, and that son had been Charley Tencharles, what

fun it would have been to leave school every afternoon and be swopped to seashores, to brooks, to mountain peaks, to the moon, to the tiny parks that still remained occasionally in cities.

She sat on her hard straight chair, uncomfortable but unmoving, for a half hour, deep in the reveries that so often beset her now.

And then the beeper on the matter transmitter sounded. With a puzzled frown she got up to press the admittance button.

Little Charley materialized and came out of the wire cage.

"Charley," she cried. "Does your mama know you've come back?"

He didn't answer. He went to stand in front of the straight chair and she followed him, sitting down and putting her hands on his shoulders.

"Charley," she said in her fake stern voice, "you should always ask your mama before you—"

Charley's lips came open but it wasn't Charley's little voice which came out.

"Susan Fiftysusan," said a deep grownup voice, "this is Holmes Oneholmes. Remember? I was one of your pupils forty years or more ago."

Miss Hippiness remembered instantly. She remembered Holmes as a child, but she knew what he was now. He headed the bureau known only by an elec-

tronic symbol. Too secret to name, it was said in high circles.

MISS Hippiness dropped her hands from little Charley's shoulders and covered her face. Things twitched and twirled like little knives somewhere deep inside her. Fear? Horror?

"You were my greatest, my very best teacher," said Holmes Oneholmes on the recording coming through little Charley's open lips. "And I have treasured your memory. So you know how hateful is my task this afternoon."

Miss Hippiness peeked at Charley's face through her fingers. His little blue eyes were blank, fastened to a spot high on the classroom wall behind her. There was no tiny bit of expression on his face.

She heard Holmes Oneholmes cough and his voice went on, official this time, all pupilness erased.

"Susan Fiftysusan," he said, "the latest recording from inside Charley Tencharles, which we have just heard, convicts you beyond reprieve. Where you found the human-wiretap information we do not know. But we'll find it, and destroy it. It is the order that your future disintegration date is hereby superseded. Instead of disintegration two years and ten days from now, you will proceed to the nearest disintegrator within the hour."

Miss Hippiness lowered her face and her old eyes began sparking. Nobody ever knew their disintegration dates which the computers put on the card at birth. Nobody ever knew when they had to march into one of those horrid machines and cease living. But to learn that her own had been set a mere two years away—and she in the prime of life. . . .

"Son of a bitch," she said, using the first 20th Century epithet that came to mind.

"You are convicted," Holmes Oneholmes was saying, "of spreading sedition and danger to our entire world in an unthinkable way, tampering with the minds of our children—"

"As if YOU don't tamper with children," she shouted.

"—and it is the order that there be no appeal from this verdict."

Miss Hippiness sat straighter. In the 20th Century, no matter what—for gangster, for statesman, for teacher—there would have been an appeal, and even another appeal, and perhaps another appeal. Life was still rich and treasured in the 20th Century.

So she held the 20th Century before her angry eyes, letting it blot out the dirty old disintegrator in its corner. How had they learned what she was doing to the sweet children?

Holmes Oneholmes' voice changed texture.

"Miss Hippiness they call you now," he said, almost fondly. "We had another name for you years ago." Almost a chuckle. "It was even better than Miss Hippiness. Don't hate little Charley, Miss Hippiness. He is an android, naturally. We had him made last year after the Freudists began picking up troublesome things in the dreams of the children you've had in class. Charley has been our wiretap, Miss Hippiness."

The old teacher's eyes clamped on Charley Tencharles. But then they softened. She shook her head. It made no difference. If they had allowed her to have a son—

"We caught an affection beyond affection," Holmes Oneholmes was saying, "in your voice when you talked to our android. So, since he has finished his service to us, we—I—decided to send him back to you, Miss Hippiness. He will march into the disintegrator with you."

A FAINT click told her the recording inside Charley had played itself out. Charley moved almost immediately. His eyes came down from the high wall to her face.

He grinned.

And she grinned back.

"Charley Tencharles," she said

gruffly, "can't you stay away from Miss Hippiness? What a boy you are. You should be out playing, maybe in a park, maybe in a boat."

"Or on a horse like in the 20th Century?" he asked.

She almost laughed. "Yes," she cried, "maybe like on a horse. With a gun on your hip—"

"And a lasso to throw at things?"

Miss Hippiness got up from the straight chair. It was so sweet, why wait? She took little Charley's hand and they walked toward the disintegrator.

There was a dreadful moment of hesitation in front of it. Miss Hippiness had heard of that last dreadful moment and she let it wrack her. Maybe this was a last relic of the 20th Century, a last real-for-sure relic.

Charley's hand moved in hers and she stooped quickly, enfolding him in her arms.

"You know what?" she cried. "There was something else in the 20th Century, Charley. It was kissing."

"Kissing?" he said.

"Yes, and I'm going to kiss you, Charley Tencharles. Just like back then."

He grinned as her lips came at him. "Aw, Miss Hippiness," he said.

There is an odd difference in the minute sounds made by matter transmitters and disintegrators. The transmitter goes swup, no matter who steps in. But the disintegrator goes schup, no matter who.

Miss Hippiness stood up and took a deep breath, holding Charley tight in her arms, almost like a baby. She didn't have to look. Having sent so many naughty children into the disintegrator years ago, she knew the way.

She took the last three steps. Schup. THE END

## SPECIAL INTRODUCTORY OFFER

**AMAZING • 434 South Wabash Avenue • Chicago 5, Illinois**

Send me 9 issues of AMAZING at the Special Introductory rate of only \$2 (regular rate \$3.50 a year).

- ☐ Payment enclosed—send all 9 issues.  
☐ I'll pay when billed—send 8 issues.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

**NOTE: LONG-TERM OFFER  
FOR EXTRA SAVINGS!**  
18 issues only \$3.75

- ☐ Payment enclosed—  
send 18 issues.  
☐ Send 16 issues and bill  
me later.

(Additional postage for addresses not in U. S. or Canada: 50¢ per year for Pan American countries; \$1 per year for all other foreign.)

AM-72

A Classic Reprint from **AMAZING STORIES**, October, 1929

Illustrated by **BRIGGS**





# The CHAMBER of LIFE

By G. PEYTON WERTENBAKER

Introduction by Sam Moskowitz

Readers of AMAZING STORIES have already read *The Coming of the Ice* by G. Peyton Wertenbaker reprinted in the July, 1961 issue of this magazine. Though only 19 at the time it was published in the June, 1926 AMAZING STORIES, the imaginative drive and youthful power of the young author had combined to compensate for its stylistic crudities and make it a memorable story.

Three years later, at the mature age of 22 he made his next appearance in AMAZING STORIES with *The Chamber of Life*. The promise displayed by *The Coming of the Ice* and the even earlier *The Man From the Atom* was fully justified. Few modern authors could have handled the theme of *The Chamber of Life* with greater maturity or stylistic finish than G. Peyton Wertenbaker. If the story has any fault, it rests in the realm of over sophistication and subtlety.

The extraordinarily difficult flashback technique is employed throughout, demanding alertness from the reader to keep abreast

of the complexity of the method. The creation of a dream world, through scientific means, which would prove more real and more desirable, in certain ways than the real worlds, was not original with the author, but it was new to the science fiction magazines. Eventually it became a standardized concept in science fiction, but in *The Chamber of Life* G. Peyton Wertenbaker was doing it early and with considerable skill.

The "dream" world that his protagonist enters is an objective yet devastating projection of an impersonally planned scientific civilization. This is not a deliberately cruel or vicious world in the sense of 1984, but it is a near-perfect communistic-socialistic state where the rights of the individual are secondary and where the pattern of every individual is planned hundreds of years in advance of his birth. He is born into a world where his education, occupation, marriage and life expectancy have been carefully calculated. This is no room for random factors.

The message of the ultimate

technological system is still secondary to the adroit allegory Wertenbaker projects. We have here what amounts to a message within a message. We all dream of a different life or a different world. But there is no permanent place for us in the world of dreams. Like the perfect scientific state of tomorrow, our intrusion will not be permanent if it is not part of the plan. Therefore, we must always return from our dreams to contend with hard reality. The temptation is always present to find some means of es-

caping reality, even temporarily, but we must resist it at the risk of even greater unhappiness.

G. Peyton Wertenbaker wrote very few works of science fiction. One of these, *The Ship That Turned Aside* (AMAZING STORIES, March, 1930) was reprinted in Groff Conklin's anthology *Big Book of Science Fiction* under the pen name of Green Peyton. One other outstanding tale remains unreprinted, Elaine's Tomb from AMAZING STORIES QUARTERLY, Winter, 1930.

#### A Strange Awakening

MY first sensation was one of sudden and intense cold—a chill that shot through my body and engulfed it like a charge of electricity. For a moment I was conscious of nothing else. Then I knew that I was sinking in cold water, and that I was fighting instinctively against the need to gasp and breathe fresh air. I kicked weakly and convulsively. I opened my eyes, and squeezed them as the bright green water stung them. Then I hung for an instant as if suspended over the depths, and began to rise. It seemed hours before I shot up into the open air again, and was drinking it deeply and thankfully into my tortured lungs. The sun touched my head warmly like the

hand of a benign god.

Floating gently, I lay there for a long while before I even looked about me. There was a vague confusion in my head, as if I had just awakened from a long sleep. Some memory seemed to be fading away, something I could still feel but couldn't understand. Then it was gone, and I was alone and empty, riding on the water.

I glanced about, puzzled. Only a few yards away rose the gray stone side of the embankment, with its low parapet, and behind that the Drive. There was no one in sight—not even a car—and the open windows of the apartment houses across the Drive seemed very quiet. People slept behind them.

It was only a little after dawn.

The sun, blazing and tinted with pink, had hardly risen from the horizon. The lake was still lined with dark shadows behind glittering ridges of morning sunlight, and a cool breeze played across my face, coming in from the east. Over the city, the sound of a street car rumbling into motion, rising and dying away, was like the crowing of a rooster in the country.

I shivered, and began to swim. A few strokes brought me to the embankment, and I clambered up, almost freezing as I left the water. I was fully clothed, but without a hat. Perhaps I had lost it in the lake. I stood there, dripping and chill, and suddenly I realized that I had just waked up in the water. I had no recollection of falling in, nor even of being there. I could remember nothing of the previous night.

A glance along the Drive told me where I was, at the corner of Fifty-third street. My apartment was only a few blocks away. Had I been walking in my sleep? My mind was a blank, with turbulent, dim impressions moving confusedly under the surface.

**T**REMBLING in the chill air, I started up the Drive. I must go home and change at once. Something came back to me—a memory of talking to some friends at the Club. But was that last night? Or months ago? It

was as though I had slept for months. We had had a few drinks—could I have been drunk, and fallen into the lake on my way home? But I never took more than two or three drinks. Something had happened.

Then I remembered the stranger. We had all been sitting about the lounge, talking of something. What had we been discussing? Franklin had mentioned Einstein's new theory—we had played with that for a while, none of us with the least idea what it was about. Then the conversation had shifted slowly from one topic to another, all having to do with scientific discoveries.

Somewhere in the midst of it, Barclay had come in. He brought with him a guest—a straight, fine-looking man with a military carriage, about fifty years old. Barclay had introduced him as Mr. Melbourne. He spoke with a slight southern accent.

In some way Melbourne and I gravitated into a corner. We went on with the conversation while the others left it. They drifted into politics, drawing together about the table where the whisky stood, leaving us alone.

Melbourne had been a fascinating man to talk to. He discussed topics ranging from theories of matter to the early Cretan culture, and related them all to one dominant scientific thread. He spoke like a man of wide knowl-

edge and experience. . . . As I walked up the Drive, bits of his conversation came disjointedly back to me with the clarity and significance of sentences from Spengler.

An early-morning taxi went by slowly as I crossed the Drive to my apartment. The driver stopped a moment, and looked at me in astonishment.

"What's the matter, buddy," he said, "you look all wet. Fall in the lake?" I smiled, embarrassed.

"Looks that way, doesn't it?" I answered.

"Can I take you anywhere?"

"No," I said, "I live here." He grinned, and started off again.

"Wish I'd been in on that party!" he called back, as he drove away.

I frowned, once more with that puzzled feeling, and went in.

#### Melbourne's Story

**G**LIMPSES of last night came back to me and pieced themselves together slowly while I undressed and drew the water for my bath.

Melbourne had been interested to know that I worked for Bausch, the motion picture producer.

"Perhaps you could be of aid to me some time," he said thoughtfully.

"In what way, Mr. Melbourne?" I asked him.

"I can talk to you about that later," he replied cryptically. "Tell me about your work."

So I told him the conception I had of the motion pictures to be made in the future. He listened with keen interest.

"I visualize a production going beyond anything done today," I said, "and yet one that would be possible now, if there were someone capable of creating it. A picture with sound and color, reproducing faithfully the ordinary life about us, its tints and voices, even the noises of the city—or traffic passing in the street and newsboys crying the scores of the afternoon games—vividly and naturally. My picture would be so carefully constructed that the projector could be stopped at any moment and the screen would show a scene as harmonious in design and composition and coloring, and as powerful in feeling, as a painting by Rockwell Kent." After a pause I added, "And I'd give almost anything if I could do it myself."

Melbourne looked at me sympathetically, reflectively.

"It might be possible," he said after a time.

"What do you mean, Mr. Melbourne?" He puffed at a cigar, and considered.

"It's not something I could explain to you off-hand," he said. "It's strange and it's new. It needs preparation."

"I'm ready to listen," I said with eager interest. He smiled.

"Perhaps I had better tell you a little of my life."

"Go on," I answered briefly.

"I had ideas much like yours when I was a boy," he began his story. "In high school and college I had believed myself an artist. I was a good musician, and I dabbled with painting and literature. I wanted to come back for post-graduate work, though, and something attracted me to science. I had put off studying mathematics until my graduating year, only to find that it fascinated me. And I was curious about physics.

WHILE I was studying for my Master's degree and my Doctorate, I felt the need of some interest to merge all the divergent sides of my nature. Something that would give me a chance to be both the artist and the man of science. That was a quarter of a century ago. The motion picture and the phonograph were just coming into the public eye. They seemed to supply just the field for which I felt a need.

"I had much the same idea as yourself, except that there were no discoveries to back it—no color photography, no method for harmonizing sound and sight. Indeed, neither the screen nor the phonograph had come to be regarded yet as essentially more

than a toy. But, like yourself, I had vision. And enthusiasm. And an intense desire to create.

"After I had taken my degrees, I went to work with almost abnormal intensity. With sufficient income to live as I desired, I fitted up my laboratory and concentrated on the thing I wanted to do. I spent years at it. I gave my youth—or, at least, the best of my youth—to that labor. Long before sound and color pictures were perfected commercially, I had developed similar processes for myself. But they were not what I wanted. The real thing was beyond my grasp, and I couldn't see how to attain it.

"I worked feverishly. I think I must have worked myself into a sort of frenzy, a sort of madness. I never mingled with people, and I became bitter and despondent. One day my nerves broke down. I smashed everything in my laboratory, all my models, all my apparatus, and I burned the plans and papers I had labored over for years.

"My physician told me that I must rest and recuperate. He told me I must interest myself again in daily life, in people and inanimate things. So I went away. For the next few years I traveled. I tore myself away from everything scientific and plunged into the business of living. Almost overnight I became an adventurer, tasting sensations with

the same ardor I had once given to my work. I went back to art, to painting and literature and music. I was a connoisseur of wines and of foods and of women. I was an experimenter with life.

"Little by little, though, the zest of that passed away. I grew tired of my dilettantism. And eventually I found that, even while I had been moving about the world and experiencing its curious values, my mind had been grappling quietly, subconsciously, with my old problem. The change in my life had given me the wider outlook, the keener understanding necessary to the accomplishment of my task. In the end, I went back to it again with renewed vigor. With greater power, too, and greater sanity."

MELBOURNE paused here. Sensing his need, I brought him a highball, and one for myself. He tasted it with a quizzical expression.

"They call this whisky nowadays!" he observed absently, with quiet irony. I wanted to hear the rest of his account.

"Go on with your story, sir," I begged him.

"The rest is simple enough—but it's the meat of the narrative. You see, I had to revise the way I was going about my work, and I went at it at a new angle. By this time wireless telegraphy was be-

ing widely developed, and there were many features of it that appealed to me. With the knowledge I had gained during my first feverish years of experiment, however, I was able to go far beyond what has been done in recent times with radio.

"I used a system differing in many respects from that of the commercial radio. We haven't time now to go into all that—I can tell you later, and it involves much that is highly technical and still secret. It is sufficient if I explain that my object was to evolve and fuse methods for doing with each of the senses what radio does with sound. Telephotography was the simplest problem—the others required an almost superhuman amount of labor.

"But my biggest job was to combine them. And, to do that, I had to use knowledge I had gained not only in the laboratory but in my wanderings about the earth—not only in the colleges and salons of Europe and America, but in the bazaars and temples of India, Egypt, China. I had to unite the lore of ancient and modern civilizations, and I created a new factor in electrical science. I suppose the simplest and most intelligible name for it would be mental telepathy. But it is more than that, and basically it is as simple and material as your own motion pictures."

I think Melbourne would have

gone on and told me more about his discoveries. At that moment, however, he paused to reflect, and we looked up to find the others leaving. The bottle of Scotch was empty.

"Ready, Melbourne?" Barclay called. We rose.

"I didn't realize it was so late," Melbourne answered. "Mr. Barrett and I have found each other most interesting."

We all found our hats and went out. Melbourne and Barclay, each apologizing for having neglected the other, said good-bye. Barclay was tired and wanted to go to bed. He went off with the others, but Melbourne turned my way.

"If you're not too weary of my company," he said, "I'll go with you a little way."

"You know I'm not," I answered. "I've never been so interested in anything before. It sounds like a chapter from Wells, or Jules Verne."

He smiled, with a little shake of his head, and we walked on for awhile in silence toward the lake. . . .

ALL this came back to me swiftly and with an effect of incoherence, much as a dream moves, during the few moments when I was getting ready for my bath. I laid out my shaving things, and put a record on the Victrola. I have never quite conquered my need for music while

I bathe and dress. I think the record was a Grieg nocturne—something cool and quiet, with a touch of acutely sweet pain and melancholy.

Then I happened to glance at a mirror for the first time. I stood amazed and transfixed. Overnight I had grown a beard such as wanderers bring back with them from the wilderness. Under the beard, my face seemed to have altered somehow, to have changed in some peculiar way. Physically it appeared younger, with an expression of calm and repose such as I had never before seen on a man's face. But the eyes were wise and old, as if—overnight!—the mind behind them had learned the knowledge of all time.

Or was it overnight? I could not lose that feeling that time had passed by since my last contact with ordinary life. It was as though, somewhere and somehow, I had lived for weeks or months in some new plane, and forgotten it. I felt richer and older than I had once felt, and the things I had been remembering seemed remote.

At that moment, a chance strain from the machine in my living room brought back a whole new group of vivid impressions, strange and yet in a sense more familiar than my memories of Melbourne. They opened up to me a different life in which I seemed to have participated by chance,

and a life which had, at first sight, no point of contact with the reality to which I had returned. . . .

#### A Chance Strain from Grieg

I RECALLED waking up in another place, on a long slope of green hill that overlooked a valley. It was dawn again. The sun was just rising over the crest of the hill behind me, and it threw long shadows across the grass from the tall, slender trees along the summit. Down in the valley a broad, clean river of clear water followed the curve of the hill until it disappeared from sight. There were other hills beyond the river, all with the same long, simple slope of grass; and, beyond the hills, there were the tops of blue mountains, swathed in white morning mist.

It was a strange place. Its strangeness consisted in a subtle appearance of order and care, as though a gardener or an army of gardeners had arranged and tended the whole vast sweep of landscape for years. It was uncultivated and deserted as waste land, but as well trimmed, in spite of its spaciousness, as a lawn.

The morning was very warm. I was not conscious of any chill in the air. I was clothed only in short trousers, such as athletes wear, and a short belted tunic

without sleeves and loose—both of them indescribably soft and comfortable.

I was aware of the strangeness of my awakening, but I seemed to have no definite recollection of falling asleep. I felt that I had come there during my sleep under unusual circumstances and from a very different life, but the thought didn't disturb me or trouble my mind in any way. My chief emotion was a curious feeling of expectancy. I knew that I was about to have some new and curious experience, something not trivial, and I was eager to meet it.

I lay there for awhile, drinking in the beauty of the morning, and breathing an air of miraculous purity and freshness. Finally I stood up, light and conscious of a sudden grace, aware for the first time, in its departure, of the awkwardness and weight which ordinarily attend our movements on earth. It was as if some of the earth's gravity had been lost.

For a while I examined the valley, but I saw no sign of life there. Then I turned and went slowly up the hill, the sunlight falling warmly on my body, and my feet sinking sensuously in the deep grass.

WHEN I came to the crest and looked over, I saw another valley before me, deeper than the first. The hill rolled away, down



and down for miles, to a long, wide plain. More hills rose from the plain on every side, as simply as if they had been built there by the hand of some gigantic child playing in a wilderness of sand. And the river, coming around the base of the hill on which I was standing, but several miles away, swept out upon a great aqueduct of stone, hundreds of feet high, which crossed the plain through its very center, a straight line of breath-taking beauty, and disappeared far away into the pass between two mountains. The whole scene was too perfect to be wholly natural.

At the center of the plain stood a tall, white building. Even in the distance from which I viewed it, it looked massive—larger than any skyscraper I had ever seen. But it was delicately and intricately designed, terraced much as most modern office buildings in New York are terraced, but more elaborately. Its base stood about the aqueduct, which passed through it, and it swept up magnificently to a slender peak almost level with the crest of the hill where I was standing. It was the only building in sight.

I don't know how long I stood there, admiring the clean sweep and vastness of the scene, before I saw something rise sharply, with a flashing of bright wings, from some hidden courtyard or terrace of the building. It was

followed closely by another and then another, like a flight of birds. They shot up swiftly, circled once or twice, and moved away in different directions, straight and purposeful. One of them came toward my hill.

IT was only a few moments before the thing sped up to me and swooped down as I waved my arms. It was, of course, a machine, slender and long, with wide arching wings. It seemed almost light enough to float. It had a deck, shielded from the wind by a shimmering transparent thing like a thin wire screen, and under the deck a cabin made, it seemed, of glass. A man and a woman stood on the deck, the woman handling the controls. They were both dressed much like myself.

The machine came to rest on the hill near me. I stepped forward, and the man leaped down to meet me. His first greeting was curious.

"So you *are* here," he said. His voice was small but cool, penetrating and metallic. I thought of fine steel wires. And, when I replied, my own voice had something of the same quality.

"Were you expecting me?" I said. He nodded, shaking my hand briefly and quietly.

"We know all about you," he answered. I was pleased—it made things simpler—but I wanted to ask him who I was. I

didn't remember anything up to the moment of my awakening on the other side of the hill. Instead, I asked him:

"Shall I go aboard?" He nodded again, and waved his hand toward the ladder. I went aboard lithely, and he followed. The girl and I glanced at each other; I was surprised and rather disturbed by her beauty and cleanliness of body. I turned to the man, a little embarrassed, as she manipulated some controls and set the ship in motion again.

"You'll have to forgive me," I said. "Something has happened, and I don't know things. I've completely lost my memory."

They understood at once.

"Your name is Baret." He pronounced it oddly. "I am Edvar, and this girl is Selda." We all looked at each other intently, and I went on hesitantly.

"I don't know where I am. Can you tell me something about myself?" Edvar shook his head.

"Only this," he said, "that we were notified of your presence and your name. This city is Richmond." I glanced about quickly.

"Richmond!" I exclaimed. "Virginia?" But he shook his head.

"I don't understand you," he replied.

I went on, with a puzzled frown. "It has changed. . . ." Both of them looked at me curiously.

"How has it changed, Baret?" the girl, Selda, asked me. I glanced at her absently and closed my eyes.

"Why . . . I don't know," I stammered, "I don't remember." For a few moments there was silence, except for the shouting of the wind past our ship. Then Selda asked me another question.

"Where are you from?" I shook my head helplessly, and answered again, "I don't know—I don't remember."

A MOMENT later we dipped into the shadow of the building, which they called Richmond. We slipped by a succession of vast and intricate façades until we came to a court-like terrace, hundreds of feet above the ground and sheltered on three sides by walls that leaped up toward the sky for hundreds of feet more. The effect of height was dizzying and magnificent.

Selda brought the ship to a quick and graceful landing. I found that we were in a large paved court like a public square, facing the east and the sun, which bathed it in cool bright light. It was still early in the morning. Innumerable windows looked down upon us, and a number of doorways led into the building on all sides. From one of these a girl stepped forward. Edvar spoke to her, evidently reporting himself and Selda. The

girl pushed several buttons on a small cabinet which hung from her shoulder. It rang, low and silvery, twice. Then she pointed to me.

"Who is that?" she asked.

"His name is Baret," Edvar told her. "I was sent to meet him."

"But where is he from? He is not registered."

"We don't know. It's an unusual circumstance, he explained, while the girl examined us all carefully. "Very well," she said finally, "you must attend him until he is registered. I'll notify Odom." Edvar nodded, and we turned away.

Glancing back as we crossed the court, I saw the ship descending noiselessly, on the square of pavement where it had landed, into the depths of the building, while the girl made other gestures with her little cabinet. Then we passed through a doorway into the subdued glow of artificial lighting.

"Why was she so worried?" I asked Edvar. "I don't understand anything, you know."

"You were not registered," he said. "We are all registered, of course, in our own cities. The authorities know where to find us at any moment of the day during our routine. If we leave the city, or depart from our usual program, naturally we note down where we are going, registering

ourselves upon our departure and upon our return. If we visit another city, our arrival there is expected and reported here, as well as our departure."

"Is all that necessary?" I asked him. "Is there a war, perhaps?"

"No," he said, "it's customary. It prevents confusion. Everything we do is recorded. This conversation, for instance, is being recorded in the telepathic laboratory at this moment—each of us has a record there. They are open to the public at any time. It makes dishonor impossible."

We paused at a doorway, and Edvar spoke a word. It opened noiselessly and we went into his apartment.

"We are assigned to you this morning," Edvar said. "We are at your service."

THE apartment was hardly very different from what I had unconsciously expected. It seemed to have two rooms and a bath. The room we entered was a sort of study. It was hung with drapes closely woven from some light metal, with cold designs that were suggestive of mechanical, mathematic conceptions, but inspiring in much the way that the lines of the building were inspiring. There were no pictures and no mirrors. All the furniture was made in straight lines, of metal, and somewhat futuristic

in design. The chairs, however, were deep and comfortable, although the yielding upholstery appeared at first sight hard and brittle as metal sheets. The room was perfectly bare, and the color scheme a dull silver and black. To me it seemed extremely somber, but it pleased Edvar and his companion.

The first thing I noted when we sat down was the absence of any small articles—books or papers or lamps—and I remarked on this, somewhat rudely perhaps, to Edvar.

"Whatever you wish is accessible," he explained with a smile. He rose and went to the draped wall. Drawing back the folds of the curtains in several places, he showed the metal wall covered with dials and apparatus. I noted especially a small screen, like a motion picture screen. Later I was to find that it served not only for amusement, showing sound-pictures projected automatically from a central office, but also for news and for communication, like a telephone.

"Would you care for breakfast?" Edvar asked me. I accepted eagerly, and he manipulated some dials on the wall. A moment or two later a small section of the wall opened, and a tray appeared. Edvar placed it on the table by my chair.

"We have had our breakfast," he explained, and I began to eat

with a keener appetite than I thought I had. It was a simple meal with a slightly exotic flavor, but without any strange dishes. During the course of it, I asked Edvar questions.

"Your life is amazingly centralized," I said. "Apparently all the things you need are supplied at your rooms on a moment's notice."

"Yes," he smiled, "it makes life simpler. We have very few needs. Many of them are satisfied while we sleep, such as cleansing and, if we like, nourishment. We can study while we sleep, acquiring facts that we may want to use later from an instrument which acts upon the subconscious mind. These dials you see are mainly to give us pleasure. If we care to have our meals served in the old-fashioned way, as you are having yours, we can do so, but we reserve those meals for the occasions when we feel the need of eating as a pure sensation. We can have music at any time—" He paused. "Would you care for some music?"

"There's nothing I'd like better," I told him. He went to the wall and turned the dials again. In a moment the room was filled with the subdued sound of a cool, melancholy music—Grieg, or some other composer, with whom I was unfamiliar, exotic and reminiscent in mood, cool, and quiet with a touch of acutely sweet

pain. I listened to it in silence for a while. It was so subtle and pervasive, however, that it seemed to play directly upon the subconscious mind, so that the listener could go on thinking and talking uninterruptedly without losing any of the feeling of the melody.

HAVE you no private possessions?" I asked. "Things that you share with no one? Your own books, your own music, your own jewelry, perhaps?"

"We have no need of them," he replied. After a moment's thought, he added, "We have our own emotions, and our own work—that's all. We do not care for jewels, or for decoration for its own sake. The things we use and see daily are beautiful in themselves, through their perfect utility and their outward symbolism of utility and creation. Our tools and our furniture are beautiful according to our own conceptions of beauty—as you can see." He made a gesture about the room.

"And who serves you with those meals, and the music, and the knowledge you learn in your sleep? Who does the work?"

"We all do the work. Each of us has his own work. Each of us is a craftsman and a creative artist. The real work is done by machine—our machines are the basic structure of our life. But we have men, highly trained and fitted temperamentally for their pro-

fessions, who watch and direct the machines. It is a matter of a few hours a day, devoted to fine problems in mechanics or building or invention. The rest of our time is our own, and the machines go on moving automatically as we have directed them to move. If every man on earth should die this morning, it would be perhaps fifty years or a century before the last machine stopped turning."

"And the rest of the time?"

It was Selda who answered this time. "We live. We devote ourselves to learning and creative thought. We study human relations, or we wander through the forests and the mountains, increasing the breadth and significance of our minds and emotions." Selda's voice, rising suddenly after her long silence, startled me, and I looked at her, disturbed again by some subtle attraction exercised over me by her body. We were silent a while, then I relapsed into my inner questionings, and turned to Edvar.

"You must live under a sort of socialistic system," I said thoughtfully. "Even a sort of communism?"

"In a sense. Rather it is an automatic life. The soul of the machine pervades us all, and the machines are beautiful. Our lives are logically and inevitably directed by environment and he-

redity just as the machines are inevitably directed by their functions and capabilities. When a child is born, we know already what he will do throughout his life, how long he will live, what sort of children he will have, the woman he will marry. The Bureau could tell you at this moment when my great-grandson will be born, when he will die, and what his life will do for the State. There are never any accidents in our lives."

**B**UT how did you develop so highly technical a civilization?" I asked.

"We came to it gradually from the last government system. It was called the *phrenarchic system*—the rule of the mind. It was neither democracy nor monarchy nor dictatorship. We found that we could tell the temperament and characteristics of a child from his early years, and we trained certain children for government. They were given power according to the qualities of their minds and according to the tasks for which they were fitted. We even bred them for governing. Later, when the machine began to usurp the place of labor all over the world and gave men freedom and peace and beauty, the task of government dwindled away little by little, and the phrenarchs turned gradually to other occupations."

**I** LEARNED innumerable details of that life from Edvar, and occasionally Selda would add some fact. They are not important now. It is the narrative which I must tell, not the details of a social system which, as I would discover later, was purely hypothetical.

The three of us spent the morning in conversation there, until the entrance of another man I had not seen before. He came in without knocking, but Edvar and Selda did not seem to be surprised. He was the representative of the Bureau.

"You are Baret?" he said, looking at me keenly.

"Yes," I replied.

"I have been directed to tell you that your visit here is temporary, and that you will be returned to your previous life at the end of a certain period of time which we have not yet calculated precisely. You have been registered with the Bureau, and you are free to come and go as you see fit, but you are not to interfere with anything you see. You are an observer. You will be expected to comply with our methods of living as Edvar or Selda will explain them to you."

With a slight bow, he turned to go. But I detained him.

"Wait," I said. "Can you tell me who I am, and where I've come from?"

"We are not yet certain. Our

knowledge of you has come to us in an unusual manner, through a series of new experiments now being conducted at the Bureau. If possible, we will explain them to you later. In any case you may be assured that your absence from your usual life will not cause you any harm, and that you will return after a definite time. Rest here, and keep your mind at peace. You will be safe."

Then he turned and left. I was puzzled for a while, but I forgot that shortly in the strangeness and wonder of the life I was living in a strange world. . . .

AND the lake? Melbourne? The Grieg nocturne came to an end. I frowned as I set down my razor, and went into the living room to change the record. Conflicting memories . . . where did they meet? On the one hand was the awakening in the cold waters of the lake—only an hour or less than an hour ago. And there was Melbourne, and the strange conversation at the Club. Finally there was this amazing and isolated recollection, like a passage from a dream.

Suddenly, as I went back to my bath and plunged into the cool water, my mind returned to Melbourne. I had been walking home with him that night from the Club—perhaps last night. We had gone on a while in silence, both of us thinking. Then we had

come to the Drive. At that moment Melbourne had said something—what was it?

He had said, "Tell me, Mr. Barrett, would you care to see that dream of yours come true?"

#### The Chamber of Life

I DIDN'T know what Melbourne meant, and I looked at him inquiringly.

He explained: "I have in my home a model—or rather a complete test-apparatus. It was finished only a few days ago. I have been postponing my trial of it from day to day, afraid that it might be a failure—although, of course, it can't be. I have verified my work dozens of times, step by step.

"If you care to see it, I should be glad to have you come with me. Now that I have reached the end of my search, I need someone to share my triumph with me." I glanced at him eagerly, but hardly understanding that his offer was serious.

"But, Mr. Melbourne," I said, "why have you chosen me—a man you've only met this evening?" He smiled.

"I am a lonely man, almost a recluse, Mr. Barrett," he answered. "I have many friends in many countries—but no intimates. It is the penalty of a man's devotion to one single and absorbing task. And, too, I think

night—especially when they are returning from parties. I suppose they manage it somehow—perhaps by signs cut in the trees, like primitive Indians.

"Even after I had worked out the machine," Melbourne continued, "it was a year's job to put together a record for a thorough trial. That was a matter of synchronization like your talking pictures, except that everything had to be synchronized—taste touch as well as sound and vision. And thought-processes had to be included. I had this advantage, however—that I could record everything by a process of pure imagination, as I shall explain later, just as everything is received directly through the mind. And I worked out a way of going back and cutting out the extraneous impressions. Even so, it was all amazingly complicated.

"I've gotten around the difficulties of this, my first record, by avoiding a story of ordinary life. Indeed, what I have made is hardly a story at all. You can readily see how hard it would have been to use the medley of noises in traffic, or the infinite variety of subtle country-sounds. Instead, I made a story of an ideal life as I have visioned it—the future, if you like, or the life on another planet."

At this moment we turned into a dark driveway and skirted a large lawn for several hundred

yards, up to Melbourne's home. It was a large house, dark at the moment, like the colonial houses you see in Virginia—the real ones, not the recent imitations that consist of little except the spotless white columns, which Jefferson adopted from the Greeks.

WE went up some steps to a wide porch as the taxi drove away, and Melbourne unlocked the door. The hall inside was a hint of quiet, fine furnishings, with the note of simplicity that marks real taste. Melbourne himself took my hat, and put it away meticulously with his own in a cloak-room at the end of the hall. Then he led me up the stairs, deeply carpeted, to his study. I glanced around the study with interest, but I saw nothing that could, conceivably, have been what he called the Chamber of Life.

"It's not here, Mr. Barrett," he said, noticing my eagerness with a smile, "we'll go to it in a moment. I thought you might care for a highball first." From a closet he selected a bottle of Scotch, some soda, and glasses. Before he poured the whisky, he removed a small box from a cabinet, opened it, and extracted two small capsules. He dropped one of them into each glass.

"This is a harmless drug," he explained. "It will paralyze some



of the nerves of your body so that you won't feel the chair you'll be sitting in nor any extraneous sensation that might interfere with the impressions you must get from the instrument. It's a sort of local anesthetic." He handed me my glass.

We drank the highballs rather hastily, and rose. Melbourne went to a door at one end of the room and opened it, switching on a light. Following him, I looked past the doorway into a small room something like the conception I had of the control-room in a submarine. It was a small chamber with metal walls. It had no windows, and only the one door through which we entered.

Around the walls were a series of cabinets with innumerable dials, switches, wires, and tiny radio tubes. It was like a glorified radio, but there were no loud speakers and no ear-phones. Two very deep and comfortable chairs stood side by side in the center of the room.

"The experience will be very simple," Melbourne said softly. "I'm not going into any detail about this instrument until we see how it works. I may as well explain, though, that the room is absolutely sound-proof, so that no trace of noises outside can enter it. Furthermore, I maintain it at an even body temperature. These precautions are to prevent interference with the sound im-

pressions and the heat and cold stimuli of the instrument. That is the only reason we have to be confined here in this room, because it is especially adapted to the reception of these impressions.

"The instrument, you see, like a radio, is operative at a distance. I am going to test you in a moment for your wavelength. When I have that, and set the instrument, you could receive the story, so far as I know, anywhere in the world. No receiving set is necessary, for it acts directly upon the brain. But you must have these ideal conditions for pure reception."

I SEATED myself in one of the chairs, yawning a little. Melbourne, working at the dials, noticed my yawn and observed approvingly.

"That's good. The more deadened your body is to real sensations—the nearer it is to sleep—the better and more vivid will be your impressions." He pressed several buttons, and twisted a dial with sensitive fingers.

"Now, concentrate for a moment on the word *Venus*," he directed. I did so, and shortly I heard a faint humming which rose within the instrument. Then Melbourne turned a switch with a nod of satisfaction, and the humming ceased.

"That gave me your wave-

length," he explained. "I have set it for my own as well—I can broadcast at one time two or more different lengths. I can broadcast more than one part in the drama, too. Whereas you, for instance, will be the man waking up in a strange world in the record we are going to receive, I have connected my wavelength to receive the emotions and the sensations of the girl, Selda."

He came forward to the other chair, and sat down.

"Everything is in readiness now," he said. "When I press this button on the arm of my chair, the lights will go out. A moment later we shall be under the stimulus of the machine. I don't think anything can happen." He smiled. "If anything does, and you are conscious enough to know it, you can call my butler by means of an electrical device I have perfected simply by speaking his name, Peter, in an ordinary conversational voice. But I don't see how anything can go wrong."

We reached for each other's hands, and shook them quietly.

"Good luck," I said. "The outcome of this means almost as much to me as it does to you." With another smile, Melbourne answered:

"Good luck to you, then, too."

At that moment the lights went off, and we sat there a few moments in total darkness. . . .

Remembering this scene, as I

bathed that morning when I came out of the lake, I began to understand more clearly what had happened to me. Evidently, then, it *had* been last night that I saw Melbourne, and the strange other-life I had been recalling earlier had been the experience in the Chamber of Life.

But there was more yet. My mind raced back to the awakening on the hill, and to the landing in the city of Richmond. I remembered the conversation with Edvar in his apartment, the place where I had left off and gone back to my recollections of Melbourne.

Now, as I stepped out of the tub and dried myself and dressed, I returned mentally to the curious, mythical adventure in the mythical city. It was still impossible for me to feel that it was unreal, it had been so vivid, so clear.

#### Baret and Selda

I REMEMBER that I lived nearly two months—or so it seemed—in that other world. I was assigned an apartment near to Edvar's—Selda was between us. Edvar instructed me in the details of the life I was to lead. But he was a rather cold sort: his interests were ancient history and archeology, and he would spend his mornings at work in the Library of History or in his

study, the rest of his time flying about the world on curious expeditions of discovery—examining the soil, I suppose, and investigating the customs and records of other cities.

Selda devoted most of her time to me. It was she who took me from place to place, showing me the natural beauties of that world. There were, you see, not only gentle slopes and hill-tops. There were mountainous crags as high and as wild as the Alps, forests as impenetrably deep and still as the jungles of the Amazon, and rivers that rushed and tumbled over rocks, or fell for thousands of feet from mountain cliffs.

The first time I went with her, she took me to a gigantic peak that overlooked the sea. There was, of course, a small level place for the airship to land. We left it there, and climbed on foot the last hundred yards or so. Our way lay through the heavy snow, but it was not too cold to be more than gloriously bracing, exhilarating. We wore our usual costume of trunks and tunic.

We stood at the top and looked out over the grandest horizon I had ever seen. To the east there lay the sea, deep and very blue in the sunlight. The shore was just a dark line far away and below us. There was a long strip of grass and field bordering the sea for miles, and behind that the

forest. Toward the north, the mountains crept out from under the forest and moved down to the sea, rising until they became a vast wilderness of cliffs and rocks, and hid the sea, with peak after peak rising as far as the eye could reach into the snow and the mist. Then the hills sloped down westward into a series of wooded valleys, through which ran the wide river I had seen at my awakening, coming down from the mountains and through the valleys until it flattened broadly out into the low plains in the south and moved eastward to the sea. Everywhere in the valleys and over the plains, I knew that cities were scattered, lonely and tall like the one they called Richmond. But we were so high in the mountains that they were invisible to us—perhaps a keen eye could have found them, tiny white dots crouching upon the earth.

I turned to Selda—and caught my breath. The wind, swooping up from the sea, whipped her thin covering against her body and fluttered it like the swift wings of a butterfly behind her. Her short, dark hair, too, was lifted and blown back from her forehead, revealing the clean, soft profile of her face. I had never seen a girl who stood so clean, so straight. I watched her until she turned, too, and met my eyes. In them I thought I de-

tected something startled and unfathomable.

"My God!" I cried across the wind, "you are beautiful!" She frowned a little, but her eyes still looked searchingly into mine. I stepped forward, facing her. But I didn't touch her. I was afraid to touch anything so clean.

"You belong here, Selda," I added. "The wind is a part of you, and the mountains, and the sea. You shouldn't have to live in the midst of all those people in the city. You belong here." She smiled faintly, looking up at me.

"You belong here more than I do, Baret," she said. "You came to us, not from the city, but from the hills."

WE stood there, examining each other's eyes, for a long while. I wanted to take her in my arms, but I didn't. I looked away at last, back at the sea, puzzled and disturbed. I had never been aware of anything so fine as this before, nor of anything so painful. Suddenly I found myself wanting to be something, to do something—not for myself, but for her. It was strange.

"Come," she said at last, "we had better go back."

"I'd like to stay here forever," I answered moodily, glancing around a last time at the versatile horizon.

"So would I," she admitted. Then, in a low voice, she added,

"But one can't. One has to follow one's program."

We returned to the airship, and rose into the cool, thin air. I stood behind her on the way back, watching her slender body as she guided the plane. Once in a while she would turn her head and look up at me over her shoulder, then quickly look away again.

"Why is it," I asked her as we passed over the valleys and the river on our way home, "why is it that these hills have such a cultivated look—as though they had been laid out?" She glanced back, and smiled.

"They *have* been laid out," she said. "The hills, and the rivers, and the tallest mountains have all been constructed by our landscape artists in order to achieve their various effects. Even the line of the sea has been determined and arranged by the artists."

"But why?" I said. "Wasn't it a frightful waste of energy?"

"It didn't seem so to us," she answered. "We had no further need to cultivate the land except in small patches, when we learned the secret of artificial food. And we wanted to have perfect beauty about us. So we remodeled the outlines of the earth, and eliminated the insects and the harmful animals and the weeds. We made the land clean and fine as it had never been before."

"It must have been a terrific labor."

"It pleased us. Our instinct is to arrange and remodel things, to order our life so that we know what it is and what it will always be." She paused for a moment, and added in a low voice, "One is necessarily a determinist here."

We said no more until our arrival in Richmond.

It is not my purpose to detail here all that happened during the time I spent on that world. Most of it had to do with Selda, and our daily expeditions about the world. This is not, after all, a love story, but the account of a very strange experience; and, too, none of it was real.

During my last week, a series of strange moods and happenings complicated my life. One day, after a visit to the sea with Selda, we were walking back to our plane across the sand. Without any warning, surrounded by the brilliant morning sunlight and the miles of sea and beach, I struck my knee against something hard and immovable, and, flinging out my hand to catch myself from falling, I clung to a hard surface like an iron railing. For a moment I was stunned and confused. The sunlight seemed to fade, and there was a vague hint of darkness all about me, with black walls looming up on all sides. It was as though I stood in two worlds at once, transfixed be-

tween night and day. Then the darkness went away, the sunlight brightened. I looked around, and found Selda watching me curiously, a little alarmed.

"What happened, Baret?" she asked, puzzled. I shook my head in bewilderment.

"I seemed to stumble—" I said. There was nothing underfoot but the soft sand, and where I had flung my hand against a sort of railing, there was nothing either. We went back to the airship in silence, both of us confused.

AFTER that, with increasing frequency, there would come interruptions, like iron bars striking dark, jagged holes in the tissue of life. From time to time I heard inexplicable noises—the whirring of motors, the skid-skid of tires on invisible streets, the rumble of carts around corners of a world where there were no carts. Again and again those moments of confusion would come over me, when I seemed to be looking into two worlds at once, one superimposed upon the other, one bright, the other dark with faint points of light in the distance. Once, walking along the corridor beyond my room in Richmond, I collided with a man. For a moment the corridor faded completely. I stood on a street with dark houses about me. Overhead was the glow of a street-

lamp, and a milk-cart was just rattling away around a corner. A man with a frightened face stood before me, his hat on the pavement, his eyes staring. We looked at each other in astonishment. I started to speak. Then he reached for his hat quickly, and brushed by me, muttering close to my ear.

"For God's sake, look where you're going. . . ."

I stood in the corridor again, staring. Down the corridor, coming toward me, was a single figure—Selda. Behind me there was nobody. I went to meet Selda, dazed and uneasy. I could still hear, close to my ear, an echo of that muffled, hoarse voice that I had never heard before.

That was two days before the end. We were leaving the city on that final bright morning, when a representative of the Bureau stopped us. I looked at him inquiringly.

"I have come to tell you, Baret," he said, "that your departure is scheduled for this evening." I drew back, startled, and looked at Selda.

"My departure?" I repeated in a low voice, hardly understanding. "So soon?" I had forgotten that one day I should have to leave.

"It has been arranged," he said impersonally.

We bowed slightly to each

other, and he went away. Selda and I stepped aboard our ship in silence.

That time we flew up the river until we came to the foothills of the mountains in the north. We landed in a little clearing by the river at the foot of a waterfall hundreds of feet high, towering over us. The forest stood about us on all sides, coming down to the river's brim on the opposite bank and meeting it not far from us on the near bank. The precipice, covered with moss and small bushes, stood above us.

WE sat a long while in silence, before I said bitterly: "So I must go."

She didn't look at me, but answered quietly, "Yes, you must go."

"I don't want to go," I cried, "I want to stay here!"

"Why?" she asked me, averting her face.

"Don't you know?" I said swiftly. "Haven't you understood long ago that I love you?" She shook her head.

"Love is something that we don't know here—not until we have been married and lived with our men. Sometimes not then." But she looked at me, and I thought there were tears in her eyes. Suddenly the impulse I had been resisting ever since the morning on the moun-

tain became insupportable, and I caught her in my arms almost roughly. Her face was close to mine, and she closed her eyes. I kissed her, forgetting everything but the knowledge that I had stumbled upon the sort of love that doesn't pass away, no matter how long a man lives.

After a while, though, she drew away as if she resisted not my desire, but her own.

"No—" she said in a low voice, "no. . . ."

"But Selda!" I stammered, "I love you—I want to marry you." She shook her head.

"No," she said again, "didn't you understand? I am scheduled to marry Edvar."

At first I didn't know what she meant.

"Scheduled?" I repeated dully. "I don't understand."

"It has been arranged for years. Don't you remember what Edvar told you about our marriages here, the very first day you came? I was destined to marry Edvar long before any of us were born, before our parents, even, were born. It's the way they order our lives."

"But I love you," I cried in amazement. "And you love me, too. I know you love me."

"That means nothing here," she said. "It happens sometimes. One has to accept it. Nothing can be done. We live according to the machinery of the world.

Everything is known and predetermined."

SUDDENLY, in the midst of what she was saying, close behind me there sounded even above the roaring of the waterfall a raucous noise like the hooting of a taxi horn. It was followed by a shrieking of brakes, and a hoarse voice near by shouted something angry and profane. A rush of air swept by me, and I heard faintly the sound of a motor moving away, with a grinding of gears. I looked at Selda.

"Did you hear that?"

She nodded, with wide, frightened eyes. "Yes. It's not the first time." Suddenly she rose, frowning, as if with pain. "Come," she added, "now we must go back."

There was nothing else to do. We went back silently to the airship, and turned its nose toward the city.

But when I left her at her apartment, promising to see her later, I had one last hope in my mind. I went to the Bureau.

The Bureau was a vast system of halls and offices, occupying two floors of the great building. I was sent from one automatic device to another—there were no human clerks—in search of the representative who had spoken to me before. Finally I found him in his apartment,

down the corridor only a hundred feet or so from my own. He was pouring over a metal sheet on his table, where innumerable shifting figures were thrown by some hidden machine, and he was calculating with a set of hundreds of buttons along its edges. He spoke to me without pausing or looking up, and throughout my interview he continued with his figuring as if it had been entirely automatic—as perhaps it was.

"What is it, Baret?" he said. I felt like a small child before the principal of the school.

"I have come to ask you whether it is necessary for me to go," I answered. He nodded slightly, never looking up.

"It is necessary," he said. "Your visit was pre-arranged and definite." I made a gesture of remonstrance.

"But I don't want to go," I insisted. "I like this place, and I am willing to fall into its life if I can remain under any conditions."

"It is impossible," he objected angrily.

"I have never been told why or how I came here. You said you would tell me that."

"I have never been told myself. It is a matter known to the men who handled it."

"If I went to them, surely they could find some way to let me stay?"

"No," he said coldly, "the thing was as definite as every event that takes place here. We do not let things happen haphazardly. We do not alter what has been arranged. And even if it were possible to let you stay—which I am inclined to doubt—they would not permit it."

"WHY not?" I asked dully.

"Because there is no place for you. Our social system has been planned for hundreds of years ahead. Every individual of today and every individual of the next six generations has his definite place, his program, his work to do. There is no place for you. It is impossible to fit you in, for you have no work, no training, no need that you can fill. You have no woman, and there are no women for your children or your children's children. You are unnecessary. To fit you in, one would have to disrupt the whole system for generations ahead. It is impossible."

I thought a moment, hopelessly.

"If I made a place?" I suggested. "Suppose I took someone else's place?" He smiled, a faint, cold smile.

"Murder? It is impossible. You are always under the control of the Bureau in some way, whether you are aware of it or not."



I TURNED away, a little dazed. The whole thing was inevitable and clear as he put it. I knew there was nothing to be done.

I left his apartment, and went down the corridor to the landing stage. No one interfered with my movements, and my commands were not questioned. I ordered a plane, and gave my name to the girl in charge.

"Your destination?" she asked.

"I said, 'I am only going for pleasure.'"

"Your return?"

"Expect me in an hour."

I had watched Selda pilot the planes for so many weeks that I was familiar with the controls. I rose swiftly, circled the building, and headed north toward the mountains. I hadn't the courage to see Selda again. It was only a little while before I came to the place by the river where we had spent the morning. I slowed down, and flew over it, just above the waterfall.

There was a landing-spot by the river just beyond the top of the fall. I came to rest there, and left the machine.

I stood looking at the river for a moment. I don't remember that any thoughts or emotions came to my mind. I simply stood there, a little dazed, and very quiet, with a vague picture of

Selda before my eyes. It was a dream-like moment.

Then I slipped over the river's bank, into the water, and the swift current, catching me up and whirling me around dizzily, carried me toward the edge of the waterfall.

#### And So to Work

I GLANCED at the clock on the mantel. It was five minutes to eight: time to leave, if I was to get a decent breakfast before I went to the office. I found an old hat in the closet and put it on. It would do until I had time to buy another.

Last night—and this morning. Last night, after supper, I had dropped by the Club for a drink. And met Melbourne. This morning I woke in the water of the lake, and came home, and dressed. And went to work. Twelve hours—and in that time I had lived two months. I had fallen in love, and died. Now I must go to work.

As I left the apartment, and turned west away from the Drive, toward the street cars, I was whistling over and over a brief snatch of music. Was it Grieg? Or some composer never heard on earth?

There were people on the street now. They went by with frowning, intent faces—on their way to work. And cars rolling

by, pausing at the cross streets with little squealings of brakes.

Everything was so simple now. I went over it all as I waited for the street car, and as I rode down town. It was strange that Melbourne had never foreseen that one possibility among so many.

We had sat down in our chairs, and then the adventure had begun. I had felt the sensation of moving about, of going from place to place. When I was a child I used to have dreams of walking about the house and about the streets. I would wake up on the stairs, or at the door—sleep-walking. Reflexes did it. I had left the chair, under the influence of the story in the Chamber of Life, and gone out of the room. I remembered now all those brief moments, when I had seemed poised on the brink of the real world—the stumbling against some hard object, the face under the street-lamp, the taxi, the voices. I had been going through the dark streets, with closed eyes, going toward the Drive—sleep-walking. And when I slipped over the bank of the river, in the dream, and down into the water—in reality I had gone over the side of the Drive, and down into the cold lake.

It had been dawn.

I LEFT the car, and walked down the street, lost in the midst of the crowds hurrying about me. It was all over, gone like one of those old dreams of my childhood. I could never forget it—never forget Selda—but it was gone. It had never existed. It had been cruel of Melbourne, cruel and ironic, to put Selda in the dream. But perhaps he had never realized that it would last over into reality.

I had no hope of seeing her again, even in the Chamber. I knew I could never find Melbourne's home: I had paid no attention to the way the taxi-driver took. And I wasn't very much interested now. It was only a dream. I had lost the only girl I had ever loved, in a dream.

I pushed open the door of the Norfolk Lunch. It was late—I had only a little while for breakfast. I sat down at one of the tables, and spoke to the waiter in much the usual manner.

"Hello, Joe. I'm in a hurry—bring me bacon and eggs, as usual."

"Coffee, Mr. Barrett?"

"Yes, coffee too. And hurry it up."

It wouldn't do to be late at the office, where I, too, was a maker of sometimes cruel dreams.

#### THE END

This is the second of a series of four articles in which Mr. Bova discusses the possibilities of life on other worlds.

# The Three Requirements of LIFE IN THE SOLAR SYSTEM

By BEN BOVA

Illustrated by FINLAY

IN our first look at the possibilities of alien life, last month, we considered the origin of life on Earth, and contemplated a 15-ton, fluorine-breathing extra-terrestrial. The purpose behind this exercise was to try to uncover the fundamental requirements of life—requirements that hold true anywhere and everywhere.

We came up with three basic requirements, which we can visualize in tabular form. (See Table 1, page 127.)

The alternatives listed in Column 3 depend largely upon the environment under consideration, and mostly on the temperatures and pressures of that environment. We might, for instance, expect to find liquid ammonia in vast quantities on Jupiter, where pressures are high and temperatures are low;

but none of the solvents listed could possibly be in liquid form on Mercury, where the bright side averages 530° F, and the dark side is near absolute zero (−459° F).

Let's take a broad look at how the Solar System's planets stack up against the Three Requirements. (See Table 2, page 127.)

The most striking feature of Table 2 is that all the planets, except Pluto, are known to possess ample carbon. Requirement 1 will be no difficulty. As you can see, though, there are plenty of question marks staring at us. We'll try to answer them as we go along.

WE must rule out at once both Mercury and Luna as likely abodes of life. Mercury's temperatures are too extreme for a reasonable solvent-medium to



Virgil  
Finlay

Artist's rendition of author's conception of Jovian sea-creature.

form. Any decent solvent would be evaporated in short order on Mercury's bright side, and would either escape directly into space, or would be sucked across to the dark side, where it would be frozen solid in a twinkling. Thus we can't postulate the formation of complex molecules that would need an energy-exchange reaction. Indeed, Mercury's chemistry must be limited to the inorganic variety.

Similarly, Earth's Moon is incapable of supporting life on its airless, waterless, barren surface. Luna's very appearance—bare rock and dust—makes it seem an unlikely place to seek life. We saw in our previous article that life on Earth interacted strongly with the planetary environment, changing an ammonia/methane atmosphere to nitrogen/oxygen, transforming barren rock to fertile soil, stocking the seas and covering the lands with life. The Moon is apparently as barren as the moment it was created; no feature of the lunar landscape is attributable to life. The Moon's big problem is lack of gravity. It cannot hold a usable atmosphere. Thus its surface is either boiling hot in sunlight, or impossibly cold in shadow. Liquids cannot exist there. From time to time, observers report seeing strange color changes in some lunar craters. These are most

likely cold gases escaping from the interior.

What about life *inside* the Moon? Sorry, we must again say no. There would be no energy source beneath the Moon's surface except radioactivity, which is no doubt much too low to support biochemical reactions. Solid-state life is seemingly out of the question altogether. Life depends on chemical reactions that must proceed at a fairly brisk pace; reactions in solids aren't fast enough. "Stone cold dead" is no accidental juxtaposition of words.

We'll have to eliminate Pluto from our list of candidates, too, simply because we don't know enough about it. Pluto is so far from us that all we can say for certain is that there's nothing we can say for certain. That leaves Mars, Venus, and the giant planets—Jupiter, Saturn, Uranus and Neptune. We'll tackle the giants a little later. Right now, let's take a closer look at our nearest planetary neighbor.

#### Invisible Venus

PERPETUALLY shrouded by clouds, beautiful jewel of our night skies, shining, mysterious, tantalizing and frustrating—the planet Venus lives up to her namesake in every way. What we know definitely about Venus

**Table 1**  
**UNIVERSAL REQUIREMENTS FOR LIFE**

Requirement	Met on Earth By	Possible Alternatives
1. Building block atom for construction of large molecules.	Carbon atoms.	Silicon, phosphorus, boron and germanium atoms.
2. Solvent-medium in which large molecules can be built.	Liquid water.	Ammonia, hydrogen fluoride, hydrogen chloride, hydrogen bromide, hydrogen sulfide, carbon disulfide, etc.
3. Energy-exchange reaction	Biochemical hydrogen-oxygen reactions.	Biochemical reactions in which either hydrogen or oxygen is substituted for (ex., hydrogen fluorine). Other reactions possible, but not enough known at present to postulate them in detail.

**Table 2**  
**PLANETARY ENVIRONMENTS**

Planet	Temperature Range		Requirement 1	Requirement 2	Requirement 3
	Max.	Min.	Met by:	Met by:	Met by:
Mercury	700°F	-459°F	carbon	none	-----
Venus	600	-35	carbon	?	hydrogen-oxygen reactions(?)
Earth	135	-120	carbon	liquid H <sub>2</sub> O	hydrogen-oxygen reactions
Luna	220	-240	carbon	none	none
Mars	80	-140	carbon	liquid H <sub>2</sub> O(?)	hydrogen-oxygen reactions
Jupiter	-150	-240	carbon	liquid ammonia	?
Saturn	-225	-297	carbon	liquid ammonia(?)	?
Uranus	-297	-350	carbon	?	?
Neptune	-333	-369	carbon	?	?
Pluto	-350	-400	?	?	?

can be summed up quickly. She's nearly the same size as Earth (surface gravity=0.85 g). She's some 25 million miles closer to the Sun than we. Her atmosphere is thick, but lacks free oxygen. It contains mostly carbon dioxide, with some carbon monoxide, nitrous oxide, methane and ammonia. Also present in the Venusian atmosphere are ethane, ethylene, and *water vapor*. These are extremely important substances, as we'll see in a moment.

Because Venus is closer to the Sun than Earth, it has long been supposed that beneath her clouds the planetary surface was quite hot. Venus' surface is invisible to our eyes, but the radio telescope can "see" it well enough. "Quite hot" turns out to be a conservative statement indeed; recent radio measurements have shown that Venus' surface temperature is about 600° F.

On this sharp edge of fact bursts a beautiful bubble that pictured Venus as a water-covered planet. All the water on Venus must be in the form of vapor. The only compounds likely to remain liquid at that temperature would be certain types of mineral oils. Incidentally, the high surface temperatures hold good for the night side of the planet as well as the day side. This means two things: first,

the Venusian atmosphere carries heat very effectively from bright to dark regions (as does our Earthly atmosphere); second, Venus does not present only one side of itself to the Sun, as does Mercury—the planet may rotate only once a month, but all parts of the planet face sunward for equal amounts of time during the Venusian year.

OF the many theories postulated about Venus' surface conditions, only two seem able to survive the 600° F surface temperature. E. J. Opik visualizes Venus as a "dust-bowl" planet, where solar-powered winds of ultra-hurricane force whip particles of dust and sand from the utterly dry ground with such violence that the friction of their rubbing together adds to the planet's already-high temperature. Not a pleasant aspect for life—or visiting astronauts. Fred Hoyle is more optimistic. He thinks Venus may indeed be covered by a planet-wide ocean—not of water, but of oil! The eyes of Texas, he concludes, should be upon Venus.

What about life on Venus? Requirement 1 is easy to meet; there's carbon a-plenty on the planet. Requirement 3 would seem to be no great problem either. Venus must receive an

enormous amount of solar energy on its surface, even though the cloud layer reflects a considerable amount of sunlight. This solar energy can be the driving force behind a myriad of chemical and biochemical reactions.

The real question of Venusian life revolves around Requirement 2: the need for a solvent-medium in which the chemicals basic to life can meet and interact. If Venus is really a dust-bowl, Requirement 2 cannot be met on the surface of the planet. The situation that might arise if Venus is covered with an

paragraphs back, and their composition (Table 3 below), we can see that Venus' atmosphere contains carbon, nitrogen, oxygen and hydrogen.

Can the gases of an atmosphere take the place of a liquid solvent-medium? Can Venus' atmosphere perform the same service in the formation of life that Earth's oceans did? Can the chemical reactions that led up to the evolution of living molecules take place in a gaseous state?

There is no wholly satisfactory answer to those questions. There seems to be no obvious

---

**Table 3**  
**COMPOSITION OF ATMOSPHERIC GASES**

1. Carbon dioxide ( $\text{CO}_2$ )
2. Carbon monoxide ( $\text{CO}$ )
3. Nitrous oxide ( $\text{N}_2\text{O}$ )
4. Methane ( $\text{CH}_4$ )
5. Ammonia ( $\text{NH}_3$ )
6. Water Vapor ( $\text{H}_2\text{O}$ )

C = Carbon  
O = Oxygen  
N = Nitrogen  
H = Hydrogen

---

ocean of oil is hazier—the chemical reactions likely to take place in such an ocean are difficult to envision. But that 600° F surface temperature makes even an oil-ocean seem unlikely.

On the other hand, all the chemical requirements for life are present on Venus. Not on the surface. In the atmosphere. Considering the constituents of the atmosphere, given a few

reason why “chemical evolution” reactions cannot take place in a mixture of gases. On the other hand, the chemical reactions we’re talking about are just tricky enough to make one uncertain of whether they could take place in anything but a liquid.

There’s a possibility, then, that life may have evolved in Venus’ atmosphere. The killing



heat of the surface eases considerably with height, and temperatures as low as  $-35^{\circ}\text{F}$  have been measured at the top of the Venusian atmosphere, above the cloud layer. Surely somewhere in those clouds is a temperature level friendly to the evolution of life.

WHAT would the Venusians look like? Aerial bacteria, probably; we have plenty of them on Earth. Insect-type life, airborne plants—a large variety of lighter-than-air life is possible. It doesn't seem feasible to expect heavier-than-air creatures (such as birds or flying reptiles and mammals) to develop in an environment where they'd have to spend their entire lives aloft. For, remember, a descent to the scorching temperatures of the surface (or even to the lower atmosphere) would kill the kind of life we're envisioning just as certainly as heat will hardboil an egg.

We can picture, then, a sort of aerial Sargasso Sea, with many types of plant and animal forms floating in the cloudy atmosphere of Venus. While they would have the entire circumference of the planet to roam in, they would be strictly limited in their vertical wanderings: straying either below or above their optimum temperature-altitude would be fatal.

Naturally, we shouldn't expect to find life forms with structures and chemistries identical to those of Earth. Plant life might well store oxygen internally instead of breathing it out. Animal forms could obtain "breathing" oxygen by eating the plants, just as desert animals on Earth obtain water by eating moisture-hoarding vegetation. The lack of free oxygen shouldn't be a lethal blow to our speculations. In fact, there are life forms on Earth that get along quite well without any oxygen at all. Various species of anaerobic bacteria live on nitrogen, iron and even sulfur compounds. The presence of free oxygen will kill some of them! Even the nuclei of our own body cells are anaerobic, harking back to the earliest living forms on Earth which evolved and developed in an oxygen-less atmosphere.

An interesting point that might be in our favor is the presence of ethane ( $\text{C}_2\text{H}_6$ ) and ethylene ( $\text{C}_2\text{H}_4$ ) in the Venusian atmosphere. These are quite simple hydrocarbons, but they are organic compounds, nonetheless. If we can observe significant amounts of organic compounds in Venus' atmosphere from 25 million miles away, what will we find when we send instrumented rocket probes into that atmosphere?

WE needn't really speculate about the presence of life on Mars. Even the most conservative astronomers will now grudgingly admit that some form of plant life no doubt exists in the greenish areas of the Red Planet. Therefore, we're going to skip over Mars for the present, in the hope that we can return at a later date and present a full story on the subject. Too much has been observed, and too many theories formulated, to capsule here.

The important point is that Mars—arid, frigid, nearly airless—seems to bear a hardy plant life. As for the possibilities of animals, and those intriguing canals . . . well, some other day. Bear one fact in mind: Mars is the only planet in the Solar System whose surface we can see with anything approaching clarity. And we see life! Can it be a coincidence, or is it that life will take root wherever it can find the barest favorable conditions?

#### Jupiter and the Giants

THE giant planets—Jupiter, Saturn, Uranus and Neptune—and their respective satellites are totally alien worlds. We're going to concentrate our discus-

sions on Jupiter and leave the other giants and their platoons of satellites to only minor references. There are two main reasons for this: first, Jupiter is representative of all the giants; and second, Jupiter is the closest giant planet to Earth, and therefore the one that we know most about.

You probably know that we can't see the surface of any of the giant planets. Indeed, there might not be a solid surface in the sense that we ordinarily think of. Their frigid atmospheres may gradually thicken, liquify, and finally become solid with depth. It was once believed that Jupiter's atmosphere must be thousands of miles thick. But more recent estimates, based on better knowledge of Jupiter's temperatures and of the physical behavior of gases, show that the atmosphere must be less than 500 miles deep, at best. It is composed predominantly of hydrogen and helium, with large amounts of ammonia and methane, plus smatterings of many other elements and compounds.

From Earth we can see only the top of this atmosphere. It is thick with clouds—ammonia crystals, methane vapor, clouds of sulfur and iron compounds. Now, while Jupiter is about 11 times larger than Earth, its "day" is slightly less than ten hours long! This extremely rap-

id rotation must churn the atmosphere into violent motion. The bright-colored bands circling Jupiter's disc must in reality be wind streams of a strength undreamed-of on Earth.

The temperatures at the top of those clouds average around  $-190^{\circ}\text{F}$ , but the temperatures existing beneath the clouds are still an open question. Jupiter's gravitational pull at the top of the cloud deck is 2.65 g, or nearly three times the gravitational force at Earth's surface. These two conditions of temperature and gravity are the chief factors to consider in our speculations about life on Jupiter. While 2.65 g is not a crushing gravitational pull, in itself, Jupiter's gravity field is nothing to scoff at. The pull gets steeply stronger as you go from the top of the atmosphere inward. And it has an increasingly powerful effect on the pressure of the atmosphere.

AT the top of the cloud level, atmospheric pressure has been estimated at about one Earthly atmosphere (nearly 15 pounds per square inch). But only some 60 miles below this level, pressure probably rises to six atmospheres and continues to go up steeply with increasing depth. The gases soon begin to liquify, partly because of the intense pressure, and partly due to the low temperature. At about

500 miles below the clouds, most of the atmospheric gases must have reached the liquid phase. We can picture a planet-wide ocean, predominantly of hydrogen, but with significant amounts of ammonia. Below the liquids come the solids—water ice, solid hydrogen, and then possibly (but not certainly) a dense core of rock and metal.

Would there be any solid "land" jutting above the surface of the ammonia-laden ocean? Not likely. Those super-powerful winds would erode an ice-mountain in short order. And the ocean currents themselves, which are also whipped into frenzy by the planet's frenetic rotation, would be hard at work knocking down anything that rose to block their path.

So we have a completely alien planet: heavy gravity, unbearable pressures, poisonous atmosphere, corrosive seas, killing cold. Can life exist on Jupiter? If our answer is no, then, we'll have to rule out the possibilities of life on the other giant planets as well, because they are all smaller and colder than Jupiter, and therefore less likely to contain the necessary ingredients and the energy source of their bigger brother. But we mustn't automatically eliminate Jupiter from consideration simply because it's alien. That kind of anthropomorphic thinking leads

only to a blind alley. Let's consider Jupiter in relation to the three fundamental requirements for life.

Requirement 1 is easily fulfilled. There's plenty of carbon available, combined with hydrogen to form methane, which is present in the atmosphere and no doubt exists in the liquified form, too. So carbon can be the building-block atom.

Requirement 2 is also met: the planet-wide ocean, with its healthy share of liquid ammonia, can serve as a solvent-medium very nicely. A bit chilly and corrosive for our tastes, perhaps, but to a would-be Jovian it might feel like a relaxing warm bath.

THE stickler is Requirement 3—an energy-exchange reaction. At first glance, biochemical reactions of the type we've seen on Earth, Venus and Mars seem to be out of the question. Conditions are too alien. But let's face the problem on its own terms. What kind of chemistry would be possible under Jovian conditions? Dr. Carl Sagan of the University of California took just that approach recently. He created, in the laboratory, a miniature replica of Jupiter's hydrogen-helium-ammonia-methane atmosphere, and subjected it to ultraviolet light and electrical discharges. The

ultraviolet light simulated UV radiation from the Sun, and the electrical discharges represented lightning flashes in the Jovian atmosphere, which have been deduced from radio telescope observations of Jupiter.

Dr. Sagan's experiment produced simple organic molecules. This leads him to believe that the same chemical processes could be taking place in Jupiter's atmosphere.

Moreover, he found that Jupiter's atmosphere exhibits a "greenhouse effect." Sunlight penetrates the atmosphere and is absorbed by the (presumably liquid) surface below. The surface re-radiates practically all the energy it receives from the Sun, but it radiates this energy as infra-red light. Jupiter's atmosphere traps infra-red light (as do the atmospheres of Earth and Venus) and prevents it from escaping back into space. Thus the atmosphere is heated. Dr. Sagan theorizes that temperatures near the surface of Jupiter might be as high as 70° F!

This is surprising news, but not altogether without supporting evidence. Radio astronomers have been attempting for some time now to get a measurement of the temperatures below Jupiter's cloud deck. Their efforts have been confounded by the presence of Van Allen belts of radiation around the planet,

which give off spurious radio noise. But even considering the obscuring effects of the Jovian Van Allen belts, there is some reason to believe that Jupiter may be considerably warmer below the clouds than was previously believed.

Dr. Sagan's experiments have led him to think that simple organic compounds may be "raining" out of Jupiter's atmosphere into the ammoniated sea below. There, in that solvent-medium, the complex chain of "chemical evolution" might have taken place and lead to the existence of life.

COMPLETELY aside from Dr. Sagan's work, there is another interesting avenue of speculation about life on Jupiter. Several observers have reported that the Jovian atmosphere contains significant amounts of a family of chemical compounds called "free radicals." A radical is simply a molecule that has somehow acquired a surplus electrical charge, either positive or negative. At Earth's temperature range, radicals cannot remain free for very long. They combine almost immediately with other chemicals. Their combinations are in some cases so powerful that rocket engineers have considered using certain types of radicals as rocket propellants. But if they exist in the

free state in Jupiter's frigid cloud layers, then even if Jupiter is as cold as it is usually presumed to be, free radicals can form the basis for a cryogenic biochemistry. The low temperatures might slow down their explosive reaction rates to a pace suitable for life processes.

Cryogenic biochemistry is a long, tall, wild speculation, of course. But so was the notion that man evolved from tree shrews—once. Assuming that we can postulate living creatures in Jupiter's ammoniated ocean, what might they look like? Living in the sea, they would be in a practically gravity-free environment. But the pressures of that tightly squeezed liquid would be something else again. On Earth, whales have been known to fight and feed at depths of 3000 feet, where the pressure must be more than a ton per square inch. In Jupiter's all-pervading ocean, pressures like that must seem trivial.

Our Jovian sea-creatures must be sturdy characters, probably with thick external shells and strong internal bracing. Unless they are willing to be swept along passively on Jupiter's racing ocean currents, they must have developed some powerful swimming ability. Flexible fins and tails seem unlikely, but possibly they've developed a form

of jet-propulsion, like the squids of Earth.

Eyes of any sort would be useless inside that darkened ocean, beneath Jupiter's cloudy atmosphere. Our Jovian cuttlefish probably would depend on touch-receptors mounted flush along his shell, sensitive to the slightest ripple, to tell him where food, friend and foe is.

A THICK-SHELLED cuttlefish, blind, possibly with grasping claws. Intelligent? Hardly. Its world would be too featureless, too limited for true intelligence to arise. The Jovians would have no way of knowing anything existed outside their ocean. They could never sense the stars. Their thoughts—if any—would never be directed any further than the next meal, or the next mating. After all, this is the intellectual climate of the ocean-dwellers of Earth. Even the frisky dolphin, for all his *potential* intelligence, has never used his fine brain to solve problems more sophisticated than eating, escaping enemies, and procreation—unless he receives an outside stimulus from man. There's no reason to suppose that Jovian sea-creatures would behave much differently.

Jupiter probably represents the best bet for life in all the giant planets and their satellites. Saturn is much like Jupiter, but

somewhat colder, hence less likely to attain the necessary temperatures for the critical biochemical reactions. Uranus and Neptune apparently have less ammonia available, which casts doubts about their ability to form a solvent-medium and meet Requirement 2.

The satellites of all the giant planets are little more than frozen ice-balls. Only Titan and (possibly) Ganymede have atmospheres that might serve as heat-absorbers. The presence of liquid ammonia is doubtful for all of them, which makes it hard to postulate life beginning on any of the satellites.

\* \* \*

SO we have a variety of probabilities: Mars almost certainly has life; Venus quite possibly does; Jupiter might, while the other giants and their satellites probably don't; the Moon, Mercury and Pluto seemingly are barren.

What about the minor chunks of metal and rock called the planetoid belt? Orbiting for the most part between Mars and Jupiter, the planetoids probably represent the raw material for a planet that never coalesced. Many planetoids swing past Earth's orbit and countless of them have flashed through our skies as meteors.

At first impression, a planetoid would seem too small even to be considered as a possible harbor of life. But science has a long history of contradicting first impressions. In 1959, Dr. Melvin Calvin of the University of California examined a meteorite that had landed a few years earlier in Kentucky. Astronomers had deduced that the meteorite, which was of the rocky, carboniferous type, originated in the planetoid belt. Dr. Calvin discovered that the meteorite contained minute amounts of a

complex organic chemical compound, called cytosine. Cytosine is one of the vital building blocks of DNA—the basic chemical of life on Earth!

The tremendous implications of this discovery are just beginning to make themselves felt in the worlds of biochemistry and astronomy. In our next article, we'll examine these implications, and see how the evolution of life now seems inextricably bound up with the formation of the Solar System.

THE END

#### COMING NEXT MONTH

Jack Vance returns in the August issue of **AMAZING**.



In his powerful novelet of adventure in the spoceways, a young crew of astronouts makes a test flight with a solar-wind-powered ship. Titled *Gateway to Strangeness*, it is illustrated by one of Schomburg's visually exciting, technically precise covers.

Sam Moskowitz profiles his first female sf writer: C. L. Moore.

ALSO: A new novelet, *Rogue Psi*, by James H. Schmitz; part II of the Lau-mer novel; the third article in Ben Bova's fact series on extro-terrestriol life; And, if there's room, a short story or two, plus all our regular features.

August **AMAZING** will be on sale at your newsstand July 10.

(Continued from page 4)

dal!", pointed at it and said "This is Humanity," and then started sniping wildly at it with a rusty blunderbuss, not even bothering to take aim as he does so. Under the circumstances, it's hardly surprising that he misses his real target, who's sitting somewhere behind him and deriving considerable amusement from his oh-so-ridiculous antics.

But is it really funny?

I don't think so. The very fact that someone like Clifton *can* exist, apparently blinded by his own hatred to the everywhere-obvious signs of human decency, is a much more scathing commentary on our times than anything Clifton ever wrote. Especially since, to judge from his stories, he once possessed considerably more sympathy for our little (or even our big) human frailties. (We *are* frail too—there's no point in denying it. But this doesn't mean, as Clifton seems to think it does, that every child born is rotten through and through from the moment of its conception.) Ralph Kennedy, in "What Thin Partitions" and the other early *psi*-man stories, was a pretty nice guy. In "Pawn of the Black Fleet" he's become a pretentious prig whose only notion seems to be that he's always right and everyone else around him stinks. To judge from his stories, I'd be inclined to suspect

a similar evolution in Mr. Clifton. I hope I'm wrong. Because if I'm not I'll be forced to consign Clifton to the same realm where I've already consigned the later Ralph Kennedy—and which is approximately the same limbo to which, I suspect, he'd consign me.

Clifton, in short, seems to have succumbed to the same disease with which he claims everybody else is infected—and it's more or less the Greek *hybris*, overweening pride. If Clifton is Kennedy and *vice versa*, as I'm inclined to suspect, then God help his friends if he still has any! And if Kennedy is the ideal towards which Man is striving, then I'd advise us to quit striving right here and now. Despite Mr. Clifton's contentions, we most of us *do* know something of humility—and thank God for that!

The worst of it is that Clifton's viewpoint is self-evidently completely inadequate. Let's face it: the only standards Clifton or anyone else has to judge us by are *human* standards, set up and maintained by human beings. The very fact that we possess such standards and consistently treat them as desirable is a positive achievement of sorts. If we were as bad as Clifton makes us out to be, the two stories I'm talking about would never have been written. Clifton just wouldn't have had any standards to



condemn us by—and if he had, they wouldn't mean anything to us.

In FANTASTIC ADVENTURES about ten years back you ran a Paul Fairman story called, if I remember rightly, "Witness for the Defence." In that story the human race was, not actually but figuratively, put on trial. The prosecution's case bore striking resemblances to Mr. Clifton's, though at far shorter length. Then the witness for the defence arrived: Christ. His testimony was short, sweet and simple. In the last million years Man has learned to distinguish between right and wrong. Period. The defence rests.

Mr. Clifton should've read this story. It's an oversimplification, sure, but a lot less so than his hag-ridden viewpoint.

Of course, maybe the people Mr. Clifton comes into contact with don't *have* any such things as ethical codes or consciences. If so, some of his wild accusations are justified—as long as they're aimed at this particular group of mindless savages. But I evidently move in different circles than Mr. Clifton does. Nearly everyone I know I'd rate as nice, though some of them have their off moments. But so did nearly everybody, up to but not including Jesus Christ Himself. And there's at least one girl here who I think is a sufficient defence

for the human race in her own right, though she wouldn't agree with me there. (This is the kind of humility that Ralph Kennedy, if not Clifton himself, lacks.) She *isn't* just about everything that Clifton says everybody *is*. She's not perfect, of course. But perfection, by its nature, is unattainable: if it weren't, it'd be synonymous with stagnation. What right has Mark Clifton or anyone else to expect it?

Maybe I'm being as intolerant as Clifton in my own diametrically opposite way. In that case, ignore me. But I leave you with this one scrap of food for thought: where everything's being blackened indiscriminately, except for certain phony bits of flim-flammy set up just for the purpose of being white, the resulting product will be none too convincing. And good fiction *should* convince the reader. "Pawn of the Black Fleet" and "Hang Head, Vandal!" don't. If Mr. Clifton *must* vituperate the human race—and he has a perfect right to do so—then make him do so in a readable fashion next time. These two stories are just "pretentious balderdash", as your Mr. Cotts described *Stranger in a Strange Land* (which, incidentally, I liked). And I don't want to read pretentious balderdash, in AMAZING or anywhere else. If Clifton *must* be contentious, then let him be contentious

in the vein of his "What Now, Little Man?" I didn't agree with his views there, but *that*, at least, was a good story.

Julian Reid  
322 Plaskett Place  
Victoria, B. C., Canada

● *And Mr. Clifton replies:*

In practicing the art of human relations, my profession for thirty years in which I have worked individually with a quarter million people, and for which many honors have been given me, both national and local, we have our own version of Murphy's law: "If there is any possible way to misinterpret what is said, someone will."

I cannot defend "Pawn Of The Black Fleet" or "Hang Head, Vandal!" against Julian Reid's charges that in his judgement these stories are poor writing. No author has any defense against that. Still, I am not entirely disintegrated. For two letters I have seen which take exception to either of these stories, I have almost a hundred praising them, with fully half saying they are the best work I have done to date. Mr. Reid is as entitled to his opinion as they, and I think we can all agree on that.

As to their content, "Pawn Of The Black Fleet" was a broad lampoon, an intended farce, written in fun and meant to be read in fun—as most people did read

it. By its very nature, lampoon makes a big deal out of a very minor one; it is written cartooning. When a cartoonist draws a huge nose, attaches a tiny face and body, and calls it Jimmy Durante; does this mean to Mr. Reid that the cartoonist really believes all there is to Mr. Durante is a huge nose; or that noses are nasty and the cartoonist hates human beings for having them? This is precisely the substance of Mr. Reid's complaint of me.

Yes, I lampooned a lot of things, and I, with my readers, had a ball. Many of them did notice that I poked more fun at the Clifton manner of story telling than anything else. Quite a few, those who have learned through experience that it is my especial delight to draw all sorts of faces hidden in the shrubbery which you don't see unless you turn the story around and look at it from a particular angle, also noticed that Kennedy came in for satire, too; that hidden down beneath the broad farce of his super-hero front, he was Strickland in a different light. One so very, very right all the time—the other so very, very wrong all the time—and both the same man seen from differing angles.

Why should the reader, himself, escape? Again and again I plainly told him, "Don't take this seriously. It's all in fun. It's

a farce, a phony from start to finish." And then I said to myself, "All right, I'm going to lampoon him a little, too. I've played fair and warned him. Now I'm going to catch him up in the drama in spite of himself. He'll know he's being had, I've plainly told him that right along, and so he'll wind up laughing at the joke I've pulled on him, too."

Is this the bothersome thing? That we have forgotten how to laugh at ourselves? Leading comedy writers and performers say yes, that one of the most bewildering developments of our time is for comedy to have become a dying art—that people have become so petulantly irritable they have all but forgotten especially that wholesome, cleansing, hearty laughter at self. Still, fifty to one did laugh with this book.

As for hating the human race: While I was reading Mr. Reid's letter, I experienced that well known flashback of memories, all those banquets given in my honor, the citations and scrolls given by service clubs, mayors, and even one from the Labor Department of the National Government, and centered on one memory I hadn't thought of for years. A memory of five thousand people who shut down the factory one morning, one cold and rainy morning, and stood in the street for hours; in the only

way they knew protesting my decision to resign my job and leave them. Mr. Reid will need to learn a thing or two about how one really shows his love for human beings before he may, I trust someday, earn such a tribute.

I have not changed since then. I was then the same wry and often caustic man that I am now. I am the same man, well known in my area as a strict and often harsh disciplinarian, who for the latter twenty years consistently had a long waiting list of college graduates hoping to get on my staff where they, too, might learn something of how one really goes about serving mankind. They and the factory workers alike knew that love for human beings is not necessarily expressed in kindly little pats on the head. I reserve that treatment for dogs. I respect man too much to give him the same treatment.

In particular, I so greatly respect the science achievements of man that perhaps I grow especially harsh in trying to insure against slackness in an area where any slackness at all means certain failure—failure not only for the person involved in it, but failure for all mankind who might have benefitted so greatly had there been success, instead.

*(Continued on page 144)*



# THE SPECTROSCOPE

by S. E. COTTS

A Century of Science Fiction.  
*Edited by Damon Knight. Simon  
and Schuster, Inc. \$4.95.*

Though Damon Knight is a "wonder," he is not magician enough to have condensed a century of science fiction between the covers of a single book. (After all, even S-F's detractors won't argue about the quantity of our output.) In fact, I'm happy to say, he hasn't tried. What he has done, rather, is to take some subjects that science fiction has undisputedly made its own, and give notable examples of the way different authors have interpreted them during the past hundred years. Even as he has not confined himself to a single subject or a single period, so too he has not limited himself to authors of one area. English and European writers share the stage with their American counterparts.

I have long been an admirer of Mr. Knight's own work, and, therefore, the excellence of his

taste as an editor is no surprise. But that in itself would not be enough to make a superior anthology. (Far too often, the same few distinguished stories have the habit of turning up in every single collection. There ought to be a law!) In the current volume, however, not only are the selections almost uniformly excellent, but unhackneyed as well. This is surely a prodigious feat, second to none.

Of course, a volume such as this is bound to raise a hue and cry. Some people will scream about the omissions of many illustrious names. Some will howl about the inclusion of those they consider unillustrious. I am loath to join these noisy shouters and screamers, but I feel that one name does need to be mentioned. After Mr. Knight refers to Theodore Sturgeon as "one of the field's living giants," it is shocking to find no story or even excerpt by him included here. In a collection so meticulously pre-

pared, this is a gross oversight.

The real core of my personal hue and cry, however, lies not in Mr. Knight's choice of authors, but in his arbitrary catalogue of subjects. While some scheme is obviously necessary for any collection that aspires to be more than the "Fireside Book of Favorite Fables," there are several whopping deficiencies in his list. He has the following sections—"Robots," "Time Travel," "Space," "Other Worlds and People," "Aliens Among Us," "Superman," and "Marvelous Inventions." Even these are not iron-clad, however. One could make a fairly good case for taking Poul Anderson's story, "Call Me Joe," out of the "Superman" chapter and dropping it into "Other Worlds and People," or even "Marvelous Inventions." (This latter category, by the way, is the weakest in the book. Neither of the contemporary selections thrill me; certainly stronger ones could be found to go alongside the Mark Twain and the Jules Verne.)

The first of his deficiencies is the absence of the satire or, the other side of the coin, the utopia. Even if I hadn't read the author's introduction, I would find this a strange blank. But after Knight bothers to give us a long quote from C. S. Lewis that includes satire, the reader can only wonder. In which of Knight's

categories are we to put such landmarks as *The Space Merchants* by Pohl and Kornbluth, or Bradbury's *Fahrenheit 451*.

Another missing division is, I believe, that which concerns itself with the future evolution of mankind. At first, I thought it was under the label, "Superman," but the stories there are not really what I mean. One doesn't take place on Earth, and the other two deal more with freaks or chance mutants than with a coordinated philosophy. There are such outstanding examples of this type that I'm sure that other readers will miss them, too: works like *More Than Human* by Sturgeon, *Re-Birth* by Wyndham, and that truly great example, *Childhood's End*, by Arthur Clarke. These are novels about people here, on this Earth, in the future. Will Mr. Knight try to wriggle out by calling them fantasies? But they're not; they're science fiction by his own definition, speculative content and all. Perhaps this is one of his few delusions—he thinks that he can "cleanly divide" science fiction from what isn't. If he didn't make this claim, one could excuse his omissions. Having made it, however, he seems to be leaving himself in the rather indefensible position of implying such categories as I have named don't belong to science fiction.

But in the end, all criticism must bow before the candor of Mr. Knight's remark that he picked the stories he liked best himself. As I said earlier, his taste is exemplary—so much so that I wish he had carried his candor a little further and included some of his own fine stories.

\* \* \*

P.S. I cannot resist making use of some sentences from Mr. Knight's introduction as a defense against J. Tilton's accusations in the April letter column of this magazine. This irate reader disagrees with my blast of Robert Heinlein's *Stranger in a Strange Land*. Tilton writes that the work is major and mature and doesn't have to be a whole; indeed, that its religious and philosophical content are of such import as to make purely literary considerations unimportant and impossible.

I gratefully take Mr. Knight's words as my own. They're tailor-made for the purpose. "I like a story that persuades, if at all, without seeming to do so; messianic science fiction is less agreeable to me, and not only because your typical self-appointed messiah can't write his way out of a paper bag: I don't like to see science fiction degraded into a vehicle for anything. The story, I think, should always be more important than the idea;

when the reverse gets to be true, you want an essay."

**The Lani People.** By J. F. Bone. 152 pp. Bantam Books. Paper: 40¢.

What is advertised on the cover as being "the daring science fiction novel of a race of beautiful females that were called non-human," turns out to be an entertaining novel by a writer who is already known to us for his contributions to AMAZING. The only thing "daring" about it, however, is that the women don't wear clothes.

For generations, the Lani have been considered aliens because they had tails and were unable to bear human young. Therefore, theirs was the lot of all exploited creatures whether animal or human—they were selectively bred, sold into slavery or used for menial labor. All this made a thriving industry for Mr. Alexander and his family, controllers of Outworld Enterprises. This state of affairs probably would have continued for generations to come were it not for one of Mr. Alexander's employees—Jac Kennon—a veterinarian who had been hired by Alexander to care for this valuable "livestock."

From the very first, Kennon couldn't accept that these "Lani" were non-human. But after many arguments, he kept his opinions to himself while he hunted for

evidence to support his belief. The final clues came from the Lani themselves, out of the oral folklore passed down through generations. They themselves no longer even realized the significance of these tales of their origins, but when Kennon heard it, he did. He discovered that they were mutants rather than non-humans, descended from the survivors of a crash on their planet.

This is not a profound or serious story—nor even a highly

original one. After all, one of science fiction's favorite topics has long been the mutants, and Sturgeon, van Vogt and Wyndham (to name a few) have all furnished notable examples of this genre. But I doubt if any of them had as much fun doing so as J. F. Bone. After all, the battle of the mutant who happens to be beautiful, willing and nude to boot is much easier to wage than that of the one with strange mental powers or three eyes or six toes.

---

*(Continued from page 140)*

And so it was in "Hang Head, Vandal!" I was saying, "Let us not be so all fired hasty in some of these ill-considered solutions to a problem. Let us think out the potential consequences first, and if we want to call ourselves scientists, then let us follow the precepts of science and consider all the evidence, not just that portion which happens to suit our expedient purpose."

It was naughty of me to say this? When it so often demonstrates its need for saying, even in science? This makes me a hater of mankind? The simplest logic defeats that. For if I hated man, why should I bother to write stories for him? Why needle him, shame him, coax and cajole him, challenge him to reach, reach for the stars—both physically and in spirit.

Who am I, with mandate to needle and challenge? Well, for that matter, who is anybody? When we are children, we wait for permission. When we are men, we step in and do a job which needs doing.

With or without mandate, I am so very proud of mankind, and have so much faith in him, that I shall go right on needling, coaxing, shaming and challenging him, however insignificant my attempt may be, trying to get him to grow up, to reach.

From my appreciated mail, apparently there are quite a few readers in many languages in many parts of the world who find this in my stories. Probably there was nothing in either of these which Mr. Reid needed; but if there had been, it's too bad he missed it.

Mark Clifton



# SHOPPING GUIDE

## Classified

Rate: 25¢ per word including name and address. Minimum 10 words. Send orders and remittance to AMAZING STORIES, One Park Avenue, New York 16, New York. Attention Martin Lincoln.

### AUTHORS

**AUTHORS!** Learn how to have your book published, promoted, distributed. Free booklet "ZD", Vantage, 120 West 31 St., New York 1.

### BINOCULARS AND TELESCOPES

**SCIENCE BARGAINS**—Request Free Giant Catalog "CJ"—144 pages—Astronomical Telescopes, Microscopes, Lenses, Binoculars, Kits, Parts. War Surplus bargains. Edmund Scientific Co., Barrington, New Jersey.

### BOOKS AND MAGAZINES

**SPECIALISTS:** Science-Fiction, Fantasy, Weird Fiction. Books, pocketbooks. Lists issued. Stephen's Book Service, 71 Third Avenue, New York 3, N. Y.

**FANTASY & SF BOOKS & Mags** lowest prices, list free. Werewolf Bookshop, 7055M Shannon Road, Verona, Pa.

**BACK** Issue, Science Fiction, Magazines and Books. Pocket Editions 5 for \$1.15. Free lists. John E. Koestner, 2124 Rene Ct., Brooklyn 37, N. Y.

**READ** America's Amateur Magazines, 8 for \$1.00. Seth A. Johnson, 339 Stiles St., Vaux Hall, N. J.

**BOOKS**, Pocketbooks, magazines. Tremendous stock, reasonable prices. Lists on requests. Science Fiction and Fantasy. Publications, 78-04 Jamaica Avenue, Woodhaven 21, N. Y.

**BOOKS**—All 10¢, 200 titles, all subjects, catalog free. Cosmar, Clayton, Ga.

### BUSINESS OPPORTUNITIES

**FREE BOOK** "990 Successful, Little-Known Businesses." Work home! Plymouth-455R, Brooklyn 4, New York.

**SECOND** Income From Oil Can End Your Toil! Free Book and Oilfield Maps! National Petroleum, PanAmerican Building-A, Miami 32, Florida.

**MAKE \$25-\$50** week, clipping newspaper items for publishers. Some clippings worth \$5.00 each. Particulars free. National, 81-DG Knickerbocker Station, New York.

**ASSEMBLE** Artificial Lures at home for stores. Materials supplied Free. Profitable! Write: Lures, Ft. Walton Beach 1, Florida.

**I MADE \$40,000.00** Year by Mailorder! Helped others make money! Start with \$10.00—Free Proof. Torrey, Box 3566-N, Oklahoma City 6, Oklahoma.

### EMPLOYMENT INFORMATION

**DIRECTORY** Reports. Construction, aviation, shipping, oilfields, government, manufacturing, trucking etc. Foreign-Stateside. Helpful information plus job-getting tips on preparing application letters. Unconditional money-back guarantee of satisfaction. Act Today. Only \$2.00. (\$2.25 Airmail) (C.O.D.'s Accepted) Research Services, Meramec Building, St. Louis 5-Z, Missouri.

### EDUCATIONAL OPPORTUNITIES

**TAKE** Bachelor's and Master's Degree correspondence courses from leading universities! Directory of 6,000 courses—\$2.00. College Research, North Highlands 7, California.

### FOR SALE

**LEG IRONS**, \$7.95; Handcuffs, \$7.95. Leather Restraints; Fetters; Collector's Specialties. Catalog 50¢. Thomas Ferrick, Box 12F, Newburyport, Mass.

**TWENTY** minerals or shells for \$3.00 postpaid. Price list at either for stamp. Southeastern Minerals, Box 2537, Lakeland, Florida.

**SENSATIONAL** French Wraparound Sunglasses, \$12.95 Value, Now \$7.98! Facsimile, \$3.98. Car Accessories! Catalogue, 25¢. Bakers, Box 57F-A, Franklin Square, N. Y.



## HELP WANTED

EARN Extra money selling advertising book matches. Free sample furnished. Matchcorp, Dept. MD-112, Chicago 32, Illinois.

WHATEVER, your needs, Amazing classified can solve them. Simply place an ad in these columns and watch your results pour in.

## HYPNOTISM

HYPNOTIZE Unnoticed, quickly, effortlessly, or refund! Thousands satisfied! \$2. Timmer, Box 244, Cedarburg, Wisc.

## INSTRUCTION

LEARN While Asleep, hypnotize with your recorder, phonography. Astonishing details, sensational catalog free! Sleep-Learning Association, Box 24-ZD, Olympia, Washington.

WHATEVER your needs, Amazing classified can solve them. Simply place an ad in these columns and watch your results pour in.

## INTEREST TO WOMEN

HOME Earnings, Typing For Advertisers. Instructions \$1. Bollinger, 500 S. Hampton, Orlando, Florida.

## MISCELLANEOUS

WORLDS Largest Book, Magazine, Self-Help and Moneymaking Listings 25¢. Millions of Unusual Titles, Gigantic Discounts. Fabulous Merchandise Bargain Book Free With Offer. Rhodes 411-Z Davidson Indianapolis 2, Ind.

"HOME Brewing! Bears, Wines." Complete instructions \$1. (Guaranteed). Crystal's, 28 BAM7, Millburn, New Jersey.

LIVE Well and Safely Under \$60.00 Monthly in Beautiful Guadalajara, Mexico. Informative Booklet with Complete Facts, Figures only \$2.00. Herbert Schulstadt, Guadalajara, Mexico.

BOOK, "Win at Draw Poker." Tells how Gamblers Win. Send \$1.00. Baston, 515 Carr Street, Augusta, Georgia.

FREE! New 1962 catalog of all photography books available. For your copy, send postcard with name and address to Catalog, Popular Photography Book Service, One Park Ave., New York 16, N.Y.

## MUSIC

SONGWRITERS: with publisher contacts, want song ideas. Share royalties. No fees. Send poems: Songwriters' Associates, 1650 Broadway, N. Y. 19-V.

## PATENTS

PATENT Searches, \$6.00. For free Invention Record, and "Information Inventor's Need," write: Miss Hayward, 1029 Vermont Avenue NW, Washington 5, D. C.

## PERSONALS

3 Questions Answered \$1.00. Send Birthdates with large, Stamped, Self-addressed, envelope. Star, 153 Camellia, San Antonio 9, Texas.

"INDEPENDENT Thinkers—Investigate Humanism! American Humanist Association, Dept. A1, Yellow Springs, Ohio."

FORTUNE telling by reading palms. 120 page Illustrated guide \$3.00 postpaid. Baston 515 Carr Street, Augusta, Georgia.

"SECRETS for Lovers," daring 128 page book, only \$2.00 postpaid. Baston, 515 Carr Street, Augusta, Georgia..

## PRINTING & PRINTING SUPPLIES

REAL Quality Low Cost Printing! Peerless 266 Dean St., Brooklyn 17, New York.

## STAMPS AND COINS

GIGANTIC Collection Free! Includes triangles, early United States, animals, commemoratives. British Colonies, high value pictorials, etc. Complete collection plus big illustrated magazine all Free. Send 5¢ for postage. Gray Stamp Company, Dept. 22, Toronto, Canada.

## TAPE AND RECORDERS

TAPE Recorders, Hi-Fi Components, Sleep-Learning Equipment, Tapes, Unusual Values. Free Catalog. Dressner, 1523 AM Jericho Tpke. New Hyde Park, N. Y.

## WANTED TO BUY

QUICKSILVER, Platinum, Silver, Gold Ores analyzed. Free circular. Mercury Terminal, Norwood, Massachusetts.

PRINTED IN U.S.A.

# THE 1962 CAR AND DRIVER YEARBOOK

is your buying guide  
to 250 new cars!



Here's the one place you can get 144 pages of information on the 250 foreign and domestic cars on the market today! Complete with pictures of each car, prices, performance data, and specifications.

get the 1962 CAR AND DRIVER YEARBOOK  
now on sale—just \$1.00

*Suddenly, it was all too much. Jay 7 was furious with the old electronic shyster. He was on his feet, shaking hands, white knuckled, gripping bars.*

*See A Prison Make*



JULY, 1962  
AMAZING STORIES  
FANTASY AND SCIENCE FICTION  
VOL. 36 NO. 7